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Comfort for a Contemporary.

Alluding to a recent issue of the Manufacturers' Record the Columbia (S. C.) State says:

The Manufacturers' Record gives the post of honor this week—title page, cover—to the State's reply to the Springfield Republican on the cotton-mill issue. But as the esteemed Republican refuses to circulate such essays, meant for the advisement of the New England mill people, we refuse to be comforted.

Our contemporary of South Carolina should take heart. It should bear in mind that much that is printed in New England about the cotton-mill issue at present is solely for home consumption, and it should not expect an abundance of the Southern view there now. Comfort may be had in the fact that the Manufacturers' Record, which publishes the truth about any section, palatable or unpalatable, is read by the New England millmen, and, consequently, that the State's essay was circulated where it should do the most good.

Railroads and Good Roads.

It is announced that the Louisville & Nashville Railroad has agreed to give free transportation over its lines to delegates to the Alabama Good Roads Convention at Anniston. This is in line with the progressive policy of the Louisville & Nashville Railroad, which is contributing so much to the development of its territory. A narrow view might lead to a conclusion that the building of good roads for general use by vehicles would tend to the disadvantage of the railroads, in that it would diminish the latter's traffic. But the contrary is the case. The extensive truck farms in different parts of the South, for instance, would not yield their handsome returns, even with excellent roads, if their only market were cities and towns within reach by wagon. Without good roads leading to convenient shipping points the railroads would hardly contribute to the profits of the farms. But by the combination of roads upon which products may be most economically hauled to the

depot and railroads giving quick transportation to the larger markets, a State should reach its highest development, agriculturally, and at the same time present the best opportunities for an increase in its industrial importance.

A Waste of Skyrockets.

One of the most astonishing journalistic manifestations in connection with the depression in New England cotton-mill circles, and worthy of mention only because it is so marvelous, is the attitude of the Beaumont Journal, and, by adoption, of the Houston Daily Post, toward the report of the Arkwright Club's committee on competition of Southern and Northern mills. Of all the papers in the South they are, we believe, the only two which apparently, without inspection or mastication, have bolted the report with all the pride and aplomb of a little Jack Horner manipulating that famous discovery of his. They seem to imagine that they have made a rich find, and have indulged in pyrotechnics of diction which would be amusing were they not so pathetic. The cause of this ruction is not easily discerned. As the feat, more difficult and foolhardy than that of a tramp sword-swallower, was accomplished several days before Christmas, it cannot be attributed to that condition of accentuated exuberance of spirits and exhilaration which comes to some newspapers during the holiday season, and, moreover, there are traces of intended design about it, for the originator of the jubilation appears to be laboring under an impression that the report was framed as a reproof to the Manufacturers' Record. In making such an assertion the Beaumont Journal says, for the words ought to be circulated as a curiosity:

It is well known that the Manufacturers' Record has been the self-constituted champion of Southern industrial affairs, and that it has claimed that the raw material unburdened with a long rail haul, cheap fuel and abundant water-power were of themselves sufficient to induce the investment of capital in Southern cotton factories and other industries, but that the bar to such investments was legislative interference by Southern States, whose people were dominated by demagogic and dishonest politicians. Now comes a report from cotton-goods manufacturers—practical business men who are presumed to have carefully investigated every feature of the question—in which the statement is made that the claims of nearness to the raw material, cheap fuel and water-power are "unimportant and of doubtful value," but that the "chief advantages" are "cheap labor, long hours and freedom from legislative interference." The committee sums up the situation by saying the labor legislation of Massachusetts—presumably restrictive and oppressive legislation—cannot be undone, and they must therefore cut wages in order to meet the competition of Southern manufacturers.

In charity that must be described as an exhibition of a shocking lack of observation, an inability to understand plain English, or, perhaps, a combination of both.

We do not propose to help the two Texan journals out of the dilemma in

which they find themselves, but they are requested to note one or two things. In the first place, the Manufacturers' Record is not prepared to adopt their inferential opinion that nearness to cotton, cheaper fuel, lower taxes, abundance of water-power, cheaper construction and cheaper sites are unimportant elements in the upbuilding of the South. We know the South too well for that. Some of the New England papers, indeed, are not willing to go as far as the Texans in thus depreciating natural advantages of the South. In the second place, the attention of the Beaumont Journal and the Houston Post is respectfully directed to the following editorial from the Memphis Commercial-Appeal, headed "How Tennessee Suffers:"

The mistake made by the people of Tennessee in refusing to call a constitutional convention when the proposition was submitted to them some months ago becomes more and more apparent every day. In the New England States the cotton spinning and manufacturing industry has discovered and admitted that it cannot compete with the Southern cotton factories, and a committee of experts who have been investigating the situation in the South have declared that there will be a rush of capital from the East in the near future. Many cotton factories, owned and controlled by more far-seeing men than the rest, have already moved South. They go to Georgia, Alabama, Mississippi, Louisiana and other States, but they turn from Tennessee as from a plague. Many thousands of dollars are invested in these plants, and many thousands of people are employed in wealth-producing and wealth-distributing, and they build up and enrich the communities in which they locate. Of the benefits they bestow Tennessee can expect to receive none. They pass by her doors and go elsewhere. Eastern mills that have been buying cotton in Memphis for half a century, and that will probably buy their cotton in Memphis in the future, will move to Georgia or Alabama, but will not come to Tennessee. The laws of Tennessee are too inhospitable—too severe. In Tennessee those who launch commercial or manufacturing enterprises are treated the same as those who violate the laws and commit misdemeanors. Both are fined, and the manufacturer and progressive citizen the heavier of the two. So long as Tennessee makes it a misdemeanor to invest capital in an enterprise which is wealth-producing and upbuilding, so long will her developmental progress be retarded. Tennessee must offer as great inducements as other States if she expects to secure her share of the capital from other sections that is moving South. To do this she must have a constitutional convention. Tennessee is suffering, and has suffered, and will suffer until a change comes.

In the third place, it must be remembered that there has been labor legislation in the South. That it has not reached the proportions of that in Massachusetts, "handicapped by the shortened labor and extremely restrictive legislation, compared with other States," in the language of the committee, is no reason why extreme care should not be exercised in the South in legislation affecting the freedom of an employer to contract with his employee and the freedom of an employee to contract with an employer. The cultivation of such a conservative spirit will not be aided by attempting to scuttle an ironclad by means of skyrockets. It is a waste of material and energy.

To Outwit Disease.

In a recent interview Dr. F. Loeber, an able sanitarian and scientist of New Orleans, made some suggestions which, if followed, will do much to give that city immunity from diseases. He pointed to New York, Boston, Philadelphia and other North Atlantic ports, and Memphis, as illustrations of the excellent results from scientific sanitation. A century ago New York was, he said, more liable to epidemics of yellow fever than was New Orleans, and during the recent visitation the disease in Memphis was confined to the unsewered portions of the city. "Give us a good system of drainage and sewerage," said the doctor, "and I believe that New Orleans will fare as have done those other cities in the North that had yellow fever even worse than New Orleans in the early part of the present century. These are positive examples which have gone before us and set an object-lesson too palpable to be overlooked." Commenting upon this the New Orleans States says:

Other equally eminent sanitarians have spoken to the same effect, and the disappearance from Europe of the black plague before the advances of sanitary movements powerfully confirms the opinions of these eminent modern sanitarians and physicians. Of course there is always an element of uncertainty in any question that is not capable of a solution by mathematical demonstration. But if we are dependent upon inductive reasoning, the method of reasoning through which all great modern discoveries and revelations in science sprung, the solution of the question, How to render New Orleans immune from yellow fever, is answered in these few, brief words: The establishment of a system of sewerage and drainage and an entirely effective and thorough system of street cleaning and garbage removal and annihilation.

This has for long been the conviction of all persons interested in the welfare of New Orleans, as well as of other Southern cities. In the former there have been difficulties in connection with sewerage and garbage contracts which have threatened to nullify the exertions for the city's health. But they have not diminished in the slightest degree the necessity for every city, whether in the South or in the North, to clean up and to keep cleaned. A first-class sewer constantly in use, smooth pavements of modern construction and drains which empty ultimately somewhere beyond the city limits are more to be desired than all kinds of germicides applied after disease has found lodgment. They prevent conditions upon which foreign diseases thrive and in the end are less costly in every way than curative methods.

To Strike or Not.

In the course of an editorial touching the suggestion that the Fall River operatives strike against a reduction of wages, the Fall River Herald, which has dealt with the subject generally in an admirable spirit, says:

In determining the course which they are to pursue, the operatives of this city probably want no advice, but if they do, the only

thing that can be said is that they should employ moderation and proceed along conservative lines. A certain price has been offered to them for their labor, and it is their business whether they accept it or reject it, just as it is the manufacturers' business whether they accept or reject the terms which are offered for cloth. And the employees know that before they reject the terms which are before them, they must study their resources and consider carefully whether they can afford to remain idle for the next two or three months. They know, too, that they must take into account the families among them whose means are extremely limited, because, in the event of a general strike, the latter must live along with the more provident. If, after due deliberation, they conclude that they can afford to hold on to their labor until the market for it improves, or warm weather comes to their relief, well and good. That is their own affair. The only danger is that heated argument or a desire to draw on the funds of some union, whose treasury doors have long been locked, may result in hasty or unwise action.

There must be a Solomon somewhere about the sanctum of the Herald. In a few sentences he has, without tendering advice, presented facts worthy of consideration, not only by Fall River operatives, but also by employes and employers everywhere. In periods of acute industrialism men are often swayed, unfortunately, by one extreme view or another. But there is usually a conservative middle ground, where both parties may meet amicably. It is to be hoped that this will be found at Fall River and in any other locality where full, free and frank presentation of all facts will prevent loss to both sides in a dispute.

MONEY FOR THE COTTON CROP.

Georgia Banks More Independent of the Northern Money Centres.

According to reports received by the Manufacturers' Record from several of the most important banks in Georgia, it is highly probable that less outside money will be required to move the cotton crop this year in some parts of the South than for sometime past. The banks of New York city and other large clearing-house centres in the North have from year to year been drawn upon for large amounts for this purpose, and it has been a source of considerable revenue to Northern financial institutions. Consequently, it is interesting to note the causes which have placed the South in its present position. While the present price of cotton has been a factor in the situation, there is reason also to believe that the farmers have diversified their crops to such an extent that they require less money, while the banking houses throughout the Southern States have more funds on hand—in other words, are in an easier financial condition. The following letters explain themselves:

J. F. Hanson, Bibb Manufacturing Co., Macon, Ga.: "Money is abundant at present with our banks to meet all demands. I think they have borrowed more or less during the spring and summer, and will no doubt continue to do so. What will be wanted in other years, and whether more or less than last, is purely a matter of guesswork, but it is safe to say that requirements will be about the same."

Samuel P. Hamilton, president Savannah Clearing Association, Savannah, Ga.: "Savannah has had ample cash the entire season without calling upon the East for assistance. This has been the most remarkable year in our existence, brought about perhaps by a declining cotton market and low prices. The steady decline caused merchants to throw their cotton upon the market as fast as possible, and not until recently has any been held. Under the existing low prices, we

think we can reasonably say local capital can carry the stock for the remainder of the season."

Robert J. Lowry, president the Lowry Banking Co., Atlanta, Ga.: "The banks of this State just now are very easy in money; planters as a general rule have paid their debts as they became due, and while the price of cotton has been much lower than was expected, yet the additional crop over last year will to some extent make up the deficit in price. We hope that our planters have raised more corn and other supplies than last year; in fact, we think they have. While it is too early to say to what extent the demand for money will be later on, I confidently believe that the banks are in better position to supply any demand that they may be called upon to supply than for several years past."

G. Gunby Jordan, president the Third National Bank, Columbus, Ga.: "The banks in the South are at present in very easy financial condition. The call of the comptroller, just issued, shows that there is a great deal of idle money on hand in nearly every bank, and they owe practically nothing in New York. But it is well enough to say that in 1896, in this immediate section, the corn and grain crop was not very good; that in 1897 the farmers had to purchase more or less supplies of this character and used considerable money to do it; that the very low price of cotton now prevailing leaves the farmer this winter with very little idle money, and I really expect to see considerable demand upon the banks another year through factors who advanced to farmers for them to make the crop of 1898."

"The truth is, I think the farmers will want more help in 1898 than they got in 1897, as the amount of money coming from the cotton crop, to the farmer, is small. The Southern banks, as a rule, are in splendid condition. They weeded out all the bad debts; the panic taught conservatism and sense; the planters are generally in fair condition, but owing to the facts as stated in the previous portion of this letter, they have very little spare money. Improved methods, deeper ploughing, more universal use of commercial fertilizers, breeding better stock and diversity of crops all conspire to put the farmers in a condition to improve, and they have been improving for several years; but the extraordinarily low price of cotton has been a great drawback to this immediate section, and the agricultural classes feel very poor this fall."

A Model Report.

Among the reports just submitted to Governor Lowndes of Maryland is the first annual report of State Fire Marshal Edwin J. Lawyer. It covers the first seventeen months of his incumbency of the office. It shows that the office has been brought to a first-class working condition, which will have its effect upon the protection of life and property in Maryland from fire, and the several suggestions about the prevention of inflammable conditions in buildings, the construction of edifices, the burial of electric wires and the careless use of oils show that the fire marshal has observed closely and has the knack of expressing practical opinions. Ten pages are devoted to statistical summaries, in which much valuable information is condensed. The report, as a whole, is a model of conciseness, clearness and practical suggestion.

If you are thinking of enlarging your mill, factory or mine, or of purchasing machinery of any kind, send us a postal card giving the character of the machinery needed.

THE IMPENDING CONFLICT.

Suggested Commercial League of England and the United States.

[Special Cor. Manufacturers' Record.]

London, England, December 20.

Let me not be understood in these few observations as being antagonistic to Germany, but I do wish to point out a fact that should be ever powerful in fostering the unity of the United States and England, and which, in my opinion, is destined to cement the commercial ties between the two countries as close as the ties of blood already exist. Let the English papers rave, until their typographical ink grows white, about our sham progress, our mushroom institutions, our indomitable gall, our corrupt politics, our great pretensions in relation to the Monroe Doctrine and other sins of commission and omission, yet the fact remains that we can make iron, steel and machinery, cotton goods, glassware and a thousand and one other commodities of life and progress cheaper and better than they are made in England.

The commercial press of this country is beginning to realize this fact, and from this fact America (if we keep a close watch upon our finances) will in a few years be able to control a large quota of English capital which is being daily displaced in this country owing to our strong competition and the unsatisfactory condition of English labor and the antiquated and semi-barbaric machinery which is now in use here. Everything, from a plow to a locomotive, from a horseshoe to a fire-engine, from a fire-plug (this is buried in the ground and has to be dug up in case of fire) to an electric railroad, reminds one of what we used in the States twenty-five years ago. The Englishman is too slow to "catch on." He is fully bloated with the idea that the world cannot progress without his consent; that if the English nation should all make up their mind to sleep over a certain day the sun would not even dare to rise above the eastern horizon; that the pole and equator would move at their dictation, and that there is nothing either on the face of the earth, under the earth or above the earth that would have the impudence to assert itself except with British consent.

Let it be understood that this is not said in a malignant spirit. I have had conversations with some of the leading men in the country, and they have acknowledged the utter and incorrigible self-opinionatedness of the masses. But let us stop to compare the progress that is being made by Germany. The stolid, sober, cool, calculating Germans are taking life seriously; are opening up new industries by the scientific study of "what has been." They are making science and application triumphant over both England's and America's superficial wealth, derived from vast incomes and natural resources. The Germans do not invent; they merely use the brain of the rest of the world and apply their superabundant energies to the end of promoting their own interests and wealth. This position is perfectly legitimate; it is the very marrow of progress. And with the excellency of German schools and the incandescent ambition of the German Emperor, who in a late speech said, "with mine and God's will Germany must progress," the United States and Great Britain will find a powerful foe, against which competition will almost be impossible, if the tide of events is not checked in time by an Anglo-American commercial coalition.

It is almost impossible to surmise where the ambitions of Germany will end. While I love that great country and

its dynasty, yet I cannot hide from myself the growing fact that only by a concerted action between England and the United States can the two countries hold the commercial and industrial supremacy to which in the past God has granted them a century's lease. I believe that all the jingo editors should stop long enough to realize that blood is thicker than water; that the two great English-speaking nations should stretch out their hands of fellowship and goodwill across the Atlantic and jointly, by some treaty—not a milk and water arbitration farce—of amity, commerce and mutual defence, which will not impair the sovereignty of either government, control the future destinies of the civilized globe.

All this may sound very queer from an American, who, in your own columns (see my article on the Nicaragua canal) has so bitterly condemned England. That was at a time when there was no common commercial, political and economical foe in sight—when England and the United States were in their separate positions free competitors and free lances. Today I write of a common foe, and by writing of a common foe I must look for a common friend, whose co-sanguinity and natural inclinations are sympathetic in nature, and whose interests lie in the same channel.

I predict that the next century will bring about ties of international amity and affection between England and the United States as will mark a new era in the world's history.

C. F. Z. CARACRISTI, C. E.

ACTIVITY AT BIRMINGHAM.

Brief Review of the Trade of the Year There.

[Special Cor. Manufacturers' Record.] Birmingham, Ala., December 28.

Markets seem to be a law unto themselves, and usually disappoint all calculations. Immediately preceding and succeeding the Christmas holidays iron is usually dull and business dragging. This year an active demand was induced two weeks since by a let-down of prices, and enough buyers took advantage of the break to make for the season an active market. Quotations are: No. 1 foundry, \$7.50; No. 2 foundry, \$7.25; No. 3 foundry, \$7; No. 1 soft, \$7.25; No. 2 soft, \$7; gray forge, \$6.50.

It is interesting to compare present conditions with those existing a year ago. Furnace stocks now are smaller than for five years past. Stocks in consumers' hands are in same condition, while several important interests have sold their production up to April. Last year stocks in furnace control were good, and with consumers they were fair, and but a limited amount for forward delivery was booked by the furnaces. On November 30, 1896, quotations were: No. 1 foundry, \$8.25; No. 2 foundry, \$7.75; No. 3 foundry, \$7.25; No. 1 soft, \$8; No. 2 soft, \$7.75; gray forge, \$7.

All during December, 1896, the market was dull, but quotations were unchanged, and this continued until latter part of January, when prices began to be openly sliced. On the 8th of February, 1897, quotations were revised and given at as follows: No. 1 foundry, \$7.75; No. 2 foundry, \$7; No. 3 foundry, \$6.75; No. 1 soft, \$7.25; No. 2 soft, \$7; gray forge, \$6.25.

Trade commenced to pick up then, and there was heavy buying during March. After that came a period of dullness and a gradual recession in prices until the climax was reached in July, when 100,000 tons was taken by a New York syndicate on the basis of \$5.75 for gray forge. That was bed-rock price for the year. From

that price it began to look up again, but never got to \$8, though it was mighty close to it.

The conditions affecting prices and the circumstances surrounding the market now are so different from then that one can't judge the present market (and the future) by the past. The extreme fluctuations of the market this year covered \$1.25 per ton, and this, the last week of the year, the market is within fifty cents below the highest point of the year and seventy-five cents above the lowest sale price.

The heavy buyers have not yet loaded up, but there has been a raft of small buyers, and sandwiched in with them "a right smart sprinkling" of fair-sized orders. When the big guns voice their orders the probability is that prices will be lifted and "the tailers on" may pay top prices. Many of the orders cover six months of 1898, and at this writing it appears as if January will be an active month. The export is keeping in line, and transactions for that account will cover 6000 to 7000 tons.

The rolling mill is usually closed down at this season of the year for recuperation. This year the closing down is for two days. This action carries its own comment as to business conditions there. The minor industries are generally in good shape, and are anticipating a good business in 1898. But they offer nothing in the way of new contracts inviting comment.

J. M. K.

BEEF SUGAR IN THE SOUTH.

A Word of Caution Regarding a New Industry.

The question of manufacturing beet sugar in the South is constantly increasing in interest, and the indications are that it may be a profitable undertaking in the Virginias. But in States farther South there is much discussion of the question. While there is no desire to oppose or discourage what may prove to be a source of great profit to farmers, as well as a new and important industrial feature, it may be well to move cautiously in the matter. While a number of analyses have been made by the Department of Agriculture at Washington, showing quite a high percentage of saccharine matter in beets grown in the South, in the opinion of experts, at least another year will be required before a satisfactory solution of the problem can be reached. A representative of the Manufacturers' Record recently made an examination of the records thus far compiled by the Department of Agriculture relative to beet-growing, and found that out of 2200 analyses which have been made by the government chemists, about 200 have come from the South. Dr. Spencer, of the Department of Agriculture, who is in special charge of the beet-sugar experiments, is authority for the statement that out of these 200 reports only a very small number have shown by analysis that the beets raised contained the necessary percentages of saccharine matter and of purity. In fact, it may be stated that thus far Monroe county, West Virginia, is the only locality where any number of samples have been grown having the right proportions combined. In this county nine samples were sent to the government which averaged from 14 to 20 per cent. of saccharine matter. Out of the samples six were of a weight up to the commercial standard, which is from about twelve ounces upwards.

Dr. Spencer, who has made a study of the cultivation of the sugar beet in Europe, and who is also familiar with the manufacture of the sugar in factories abroad, informed a representative of the

Manufacturers' Record that it is essential to have the beets of the weight mentioned, also that they should combine the necessary percentages of saccharine matter and of purity. Beets may be grown of the necessary weight and yet fall below the average in the other properties, while on the other hand, beets containing a large portion of saccharine matter may be raised and yet be so small as to be practically valueless for manufacturing purposes.

In a previous article on this subject, we made the statement that twelve tons of beets should be raised to the acre in order to make their cultivation profitable. All these elements entering into the consideration of the question, it will be seen that it is one of much gravity, and that those who undertake to enter into the cultivation of the vegetable on a large scale or into its manufacture without investigating all the conditions, may make a serious and costly mistake. While Dr. Spencer believes that certain sections of the South may have all the advantages for growing beets at a profit, in case the pioneers in beet culture should make a failure, it might cause much injury to the Southern States at large in deterring Northern investors and others from becoming interested in this line in any portion of the South. Consequently, it is well to make haste slowly in the matter, and no harm will be done in at least awaiting the result of further analyses made by the government and by the several State boards of agriculture.

IN EASTERN ALABAMA.

The Town of Lafayette and Its Surroundings.

[Written for Manufacturers' Record.] Should a person go up into the Piedmont section of Northeast Georgia, towards the headwaters of the Chattahoochee river, climb up to the summit of the northern watershed of that stream, turn his face southwest, and follow the ridge for perhaps 200 or 300 miles, he would walk dryshod into the northern door of the courthouse at Lafayette, in the county of Chambers, middle East Alabama, about a dozen miles from the western border of Georgia.

East Alabama was the home of the Creek Indians for many years after the State was admitted into the Union, in the year 1819, and the beautiful nomenclature of that great tribe still adheres to all our streams. Eastward a dozen or more miles flows the gentle Chattahoochee on its way to the gulf, made historic forever by the battles of Generals Sherman and Johnson, whose armies fought along and across its peaceful waters and dyed its shores with fraternal blood during our great war.

To the west about the same distance is the Tallapoosa river, also on its way to the gulf, and long known to history by the Battle of the Horseshoe, where Red Eagle's tall warriors went down in final and bloody defeat before the wild soldiery of General Jackson.

Occupying the divide between these two streams, and containing within its limits the farthest southern foothills of the famous Piedmont region, is the county of Chambers.

Near the centre of the county, and nearly 1000 feet above the level of the sea, quietly nestled among green wooded hills, is the beautiful town of Lafayette. It was settled about 1833, and, like many other towns named for the great Frenchman, the friend of Washington and American liberty, soon after his last visit to this country. As you see, Lafayette is an old ante-bellum town, and the spirit of those halcyon days before the war still broods over it, and lingers about

it, and imparts to it the peculiar charms of that remarkable era which can never belong to towns of later growth.

Here are to be found combined in an eminent degree all the essentials of an ideal country—healthfulness, a genial climate, a fertile soil and diversified production. It lies between the thirty-second and thirty-third degrees of latitude, a blending of the sub-temperate and sub-tropic which makes a climate and production that can be found nowhere else. It is exactly the same latitude where God in His wisdom fixed the cradle of the human race in the beautiful and fertile valley of the Euphrates. The surface of the country is hilly, and finely drained by abundant streams of water, that never go dry in winter or summer. The character of the soil is red, mulatto and light sandy, underlaid with a fine clay subsoil, which makes it capable of the highest state of improvement.

Almost anything can be grown upon it except the fruits and products which are indigenous to the tropics only. We raise cotton of the best fibre, corn, wheat, rye, oats, all the small grains, all kind of garden vegetables, sweet and Irish potatoes (two crops of the latter annually), rice, tobacco, peas, peanuts, all kinds of melons and fruits, peaches, apples, pears, plums, figs, etc., all the small fruits, strawberries, raspberries, grapes, etc.

We also raise sugar-cane and sorghum or millet of different kinds. Our people make syrup from the sugar-cane for their own use, and also for market. Many make their sugar at home for ordinary purposes. The crabgrass is our best native grass for making hay, which it does of a very superior quality. This is also the adopted home of the Bermuda grass, which is next thing to corn for stock. We raise as good mules and horses as can be found anywhere.

Our timber consists of all varieties of the oak, hickory, chestnut, gum, and, in fact, all the hardwoods, interspersed with the stately pine. Though we have many cool, sparkling springs, our drinking water is mostly obtained from wells; it is a pure freestone, clear as crystal, and needs no ice in the warmest summer; in fact, it is better without it; it can be obtained anywhere at a depth of twenty to forty feet, and costs but little.

We have three cotton factories in the county, all in a thriving condition. Two of them run by the waters of the Chattahoochee, and the other by steam. They are near each other, and form a nucleus where there will be some day a great manufacturing centre.

Lafayette has a population of only about 1500 people, but does a large business. Its cotton receipts range from 16,000 to 18,000 bales, all of which is sold here, and which at the present low price amounts to the sum of \$500,000. We have three churches—Methodist, Baptist and Presbyterian; also an excellent college now in a prosperous condition, and one bank.

Lafayette is situated on a branch of the great Central system of Georgia, twenty miles from the city of Opelika, where it leaves the main line. It has another railroad also from same point terminating here, and owned by our merchants. We are in daily communication with several large cities, Atlanta and Columbus, Ga., Birmingham and Montgomery, Ala., which gives our people a ready market for anything they have to sell.

There are many people in the North and Northwest who would like to find homes in the South, but don't know what part will suit them. It is for this class I have written this to your valued journal, with the hope that it may come

under the notice of some of them. If they have formed an ideal of the kind of country and people they want to live in, and with, I believe they can find it here.

There are thousands of acres of land adjacent and near to Lafayette that can be bought cheap by the right sort of people. We want good, solid, energetic men with families and with means to buy homes and become permanent citizens, and if they have a surplus in their pockets, all the better, as they can use it here safely and profitably. English-speaking people preferred, as they sooner become identified with our people. Such a class will find a cordial welcome. We are a free people, and believe in free speech, and law and order, and will not ask them about either their religion or politics, and they will find themselves as safe in person and property as anywhere in the Union of States. Will be glad to answer any inquiry.

G. H. B.

Lafayette, Ala.

JAMES RIVER POWER.

Privileges Granted an Electrical Company in Richmond.

Mayor Taylor, of Richmond, Va., has signed an ordinance which will permit of an enlargement of the commercial use of the magnificent water-power of the James river. The ordinance grants a thirty-year franchise to the Virginia Electric Co., of Baltimore, for the purpose of operating an electric-light and power plant, of erecting poles and running wires, of constructing subways and of utilizing the waste flow in the river.

A large number of contracts have already been made between the company and manufacturers, and it is the intention of the company to push forward the survey and get to work as quickly as possible on the construction of the plant. The privileges are granted subject to these conditions:

1. That the said Virginia Electric Co., of Baltimore city, will, within one year from the date of the approval of this ordinance, begin, in a manner satisfactory to the city engineer, to construct and erect such hydraulic work in and near James river as may be necessary to furnish water-power to produce not less than 2000 horse-power of electricity for the furnishing of electric power and light.

2. That it will continue, to the satisfaction of said engineer, to push towards completion such work until the said company shall be ready to furnish electric power for the generation of light and power, or to furnish electric light or power.

3. That it will, within two years from the passage of this ordinance, have its hydraulic work so far completed as to be ready, in the opinion of the city engineer, to begin erecting poles and running wires under this ordinance for the furnishing of electric light and power.

4. That it will, within twenty-two months from the passage of this ordinance, file with the city treasurer a bond for \$10,000, issued either by the city of Richmond or by the United States, payable to the treasurer of said city, to be held by him on the following conditions:

First. That it will, within two months from the filing of said bond, have all of its hydraulic work sufficiently completed as to be ready to furnish electric power to the extent of not less than 2000 horse-power, and have its power-house or houses sufficiently completed and equipped to generate and furnish electric power to the extent of at least 2000 horse-power.

Second. That it will, on or before the expiration of said two months, begin to

erect the poles and run the wires authorized under this ordinance, and will continue diligently and to the satisfaction of said city engineer to erect and run a sufficient number of poles and wires to furnish light and power on or before the expiration of the six months succeeding the expiration of said two months to any and all persons and manufacturers desiring the same, to the extent of at least 2000 horse-power.

If, at the expiration of said six months, the company shall not have done and performed each and every condition and requirement above stated, then the said bond shall become and be the absolute property of the city. But if, at the expiration of said time, the company shall have performed each and every condition and requirement, the city council shall order the said treasurer to surrender the said bond to the said company or its representative.

Third. The rights and privileges herein granted are given upon the express condition that the said company, in establishing and constructing its hydraulic works above alluded to, shall not in any way or to any extent injure, diminish or interfere with the water rights and powers of the said city, without the consent of the city council first had and obtained.

Fourth. For any failure to comply with any requirement of this ordinance, or which may be imposed hereafter, the company shall be liable, unless otherwise provided, to a fine of not less than \$10 nor more than \$500; each day's failure to be a separate offense.

The officers of the company are: President, F. C. Todd; vice-president, W. J. Cross; directors, F. C. Todd, W. J. Cross, A. D. Bobson, Robert Molinard, Josiah Pierce, Jr.; secretary and treasurer, O. D. Bobson.

NEW ORLEANS DRAINAGE.

The Work of Placing the City in Sanitary Condition.

One of the most important works of engineering and public improvement ever begun in the South is the drainage system now under contract in New Orleans. The National Contracting Co. has the work, which is in progress under Superintendent Frank P. Mullen. The whole system, it is estimated, will mean the expenditure of about \$8,000,000. Great dredging machines are opening the way for the flow of water in temporary canals, and the construction of conduits and different plants is under way. Beside providing for a proper outfall to the lake from several pumping stations and many conduits, the present contract calls for the erection of a central power-house and three pumping stations. In the central house will be placed machinery to operate the three stations, though room will be left for the machinery for the other stations yet to be contracted for.

The power-house will have a machinery room 178 feet long by ninety feet wide, while the boiler-room will have the same length, with a width of forty-five feet. This building will be complete in every detail, and will be constructed with pressed brick inside and out. The wainscoting in the machinery room will be of encaustic tiling seven feet high. There will be placed in the machinery room three K. & W. generators, one 350 K. & W. generator and two 750 generators. These generators will be driven by the highest type of engines constructed by the E. P. Allis Co., of Milwaukee, Wis., and will aggregate about 5000 horse-power. The space allotted for additional machinery will be sufficient to accommodate generators of about 6000 horse-power. The boilers will be of the

best make, steel headers and equipped with improved smoke-consuming devices in compliance with the city ordinances. The machinery room will be paved with Schillinger pavement, and the switch-board will be constructed of marble, and will be about thirty-six feet long by twelve feet high. A powerful traveling crane will be one of the important accessories to this room. It will be operated by electricity, and so arranged as to hoist into or out any part of the machinery required. This plant will be provided with a complete outfit of tools, drills, lathes, etc., so that in the event of anything happening to the machinery, it can be repaired on the ground. The interior will be sub-divided with offices, quarters for the chief engineer and the employees, and furnished with all the latest improved sanitary appliances for their convenience.

The pumping station to be known as No. 7 is to be at a point where the New Orleans & Western and the Spanish Fort roads cross each other, at the intersection of Orleans street and Taylor avenue, directly behind the northwestern corner of the city park. This pump, in conjunction with station No. 2, will be the most important drainage station in the system, for the reason that it will drain that part of the city between the old and new basins and the commercial district from the levee to the rear of the city, directly over the Orleans canal. This station will be equipped with four immense centrifugal pumps, each nine feet in diameter, and each having a capacity of discharging 11,250 gallons per minute, or 675,000 every hour. These pumps will be operated by motors, which will be located at the station and driven by electricity generated at the central power station. The building will also be equipped with all the necessary sanitary appliances. The design will be neat, and will correspond with the style of the central power station. The wainscoting will be of enameled brick. A traveling crane will constitute part of the equipment.

Station No. 2, a duplicate of No. 7, will be erected at the corner of Broad and St. Louis streets, and work will be started as soon as the pile-driver at the central station is finished with and brought to that point, it being the object to complete stations Nos. 2 and 7 and the central power station as soon as possible in order to provide better conditions for the drainage of the commercial section of the city. Piles are already being delivered on the site.

Pumping station No. 6 will be located at the upper protection levee, in the rear of the Metairie Cemetery, where the New Orleans & Western Railroad crosses the canal. This station will also be a duplicate of No. 7 in all particulars. It will remove the water now thrown by the Dublin avenue and the Melpomene drainage machines, and will provide drainage for the whole of the fourth, sixth and seventh districts, and part of the first district. It is the ultimate intention to use this station as a relief station for this section of the city.

The contracts for the other stations will be let by advertisement. It is calculated that the whole work could be completed in about three years if it was in charge of the present contractors. Among the many benefits to be derived from the new system are the absence of deep gutters and the prevention thereby of the accumulation of filth and the laying with a firm pavement of all streets that have to be excavated. The last-mentioned feature will undoubtedly contribute much to the sanitation of New Orleans, as even pavements are as important almost as the drainage, of which they are a part, for a city's health.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Official Appointments.

Don Alexander, assistant general freight agent of the Chesapeake & Ohio, has resigned and the office has been abolished. Mr. Alexander has been appointed general manager of the Blue Ridge Dispatch freight line. F. T. Walker has been appointed freight agent of the Chesapeake & Ohio at Louisville, Ky. J. F. Orndorff has been appointed claim agent at Louisville.

The board of directors of the Baltimore & Ohio has re-elected Hon. John K. Cowen president of the company.

Recent changes announced on the Louisville & Nashville are as follows: W. S. Martin, superintendent of the main line division, with headquarters at Louisville, Ky., will succeed B. F. Dickson as superintendent of the Evansville & Henderson division. B. M. Starks, assistant superintendent of the North & South Alabama and the Birmingham Mineral divisions, will succeed to the superintendency of the main line division. Mr. Starks will be succeeded by J. L. Welch.

The receivers of the Memphis & Charleston Railroad have appointed C. P. Cooper auditor, to succeed A. H. Plant, resigned.

A. H. Plant, who has been auditor of the Memphis & Charleston Railway for the past several years, has resigned his position, and it is understood will go with the Southern Railway as chief of the auditing department, with headquarters at Washington.

H. E. Hutchens has been appointed superintendent of the Atlantic & Danville, with headquarters at Norfolk, Va. Mr. Hutchens was formerly connected with the Plant system.

Southern Railway Florida Service.

The fast express trains between New York and Florida over the Southern Railway this winter will be hauled by several of the largest locomotives ever built in this country. It is claimed that such is their power and speed that one of them can haul a train of thirty-three Pullman cars at a rate of sixty miles an hour or a weight of 1320 tons. As the average train does not consist of over six or seven Pullman coaches, this will give an idea of the high standard of these locomotives. They will have cylinders twenty-one inches, with a piston stroke of twenty-eight inches, and each will have six driving wheels. The estimated weight is seventy-five tons each, and with the tenders they will weigh 117½ tons each. It is stated that the engines will have nearly double the power of the famous 999 class of the New York Central Railway, which have been noted for their remarkable speed. Each train is a superb moving hotel, with every inch of space economized and put to some good use. It has its kitchen, its dining-room, its apartments, single or en suite, its writing-room, reading-room and its parlor. The entire train is equipped with not only every accessory that will contribute to comfort, but also with all the luxuries of home or hotel life.

Gulf & Ship Island Extension.

Referring to the proposed railroad line from Natchez, Miss., to a connection with the Gulf & Ship Island Railroad, which will form a line from Natchez to tidewater at Gulfport, Miss., W. H. Hardy, of Meridian, Miss., writes the Manufacturers' Record as follows: "The road is projected to extend from Natchez

by the way of Columbia and Lumberton. For 120 miles it will be built through what is considered to be one of the finest pine-leaf timber sections in the world. It is claimed that a strip of land fifteen miles wide on either side of this road gives 2,304,000 acres of timber, which will average 3000 feet to the acre, or 1,404,000 carloads, at \$10 per thousand feet. This timber is calculated to be worth fully \$115,000,000. The line also passes through an excellent agricultural territory, and will connect Natchez, which is a cotton market of 65,000 bales of cotton yearly, with the only seaport of the city—Gulfport. The entire line, including the Gulf & Ship Island Railroad, now in operation, will be 250 miles long."

Mr. Hardy is the principal promoter of the enterprise.

Another Arkansas Road.

According to a New York dispatch, the Colonial Trust Co., of that city, has purchased an issue of \$400,000 in bonds of the Mississippi, Hamburg & Western Railroad Co. This corporation proposes to build a line from a point on the Mississippi river, in Eastern Arkansas, to Hamburg, and eventually Texarkana. The first section of the road will be forty miles long, and will pass through the same section of the State as the road which was promoted by the late Austin Corbin, but which was not completed. One of the principal promoters of the new enterprise is J. M. Parker, formerly president of the First National Bank of Cripple Creek, Col. Several months ago Mr. Parker advised the Manufacturers' Record that he had given up his interests in Denver and intended to devote all his time to the Arkansas project. If built, the road will traverse a country at present nearly destitute of transportation facilities, and if completed to Texarkana, will form important connections with the trunk lines now entering that city.

Important Southwestern Line.

According to the statement of Jos. J. Waitz, president of the Gulf, Louisiana & Great Northern Railway Co., this line will be one of the most extensive in the West and Southwest when it is completed. Mr. Waitz advises the Manufacturers' Record that a contract has been let for constructing it from Vermillion Bay, on the Gulf of Mexico, through the State of Louisiana to the Arkansas State line. This is a distance of 270 miles. The contract has been secured by the St. Louis Construction Co., of which D. P. Alexander is president. The first section will be built from Alexandria, La., to Arcadia, a distance of 106 miles, and Mr. Waitz states that work is to begin immediately. The ultimate terminus of the line is to be at St. Paul, Minn., and it will be 1800 miles in length from tide-water to the great lakes. The work is to be let in sections as rapidly as the preliminary arrangements can be perfected. Chas. F. Rock, of St. Joseph, Mo., is secretary.

Holds Its Original Title.

The Baltimore & Ohio Railroad has had ten presidents in the seventy-one years of its existence. They are as follows: Philip E. Thomas, Louis McLane, Thomas Swann, William S. Harrison, Chauncey Brooks, John W. Garrett, Robert Garrett, Samuel Spencer, Charles F. Mayer and John K. Cowen. The line was put in operation to Harper's Ferry in 1834, was built to Winchester, Va., in 1836, and to Strasburg in 1870. Westward it went to Cumberland in November, 1842, and on to Wheeling, W. Va., by January 1, 1853. The Parkersburg

branch, from Grafton to Parkersburg, was opened May 1, 1857. It is the only great railroad company in this country that is being operated under its original name and charter.

The Louisville & Southeastern.

A dispatch from Louisville, Ky., states that the Richmond, Nicholasville, Irvine & Beattyville Railroad has been reorganized as the Louisville & Southeastern Railroad Co., the incorporators being Adolph Segal, Barclay M. Woodward and Herman Hooper, of Philadelphia; David W. Fairleigh, of Louisville; James B. McCreary, of Richmond, and G. W. Gourley, of Beattyville. The capital is \$2,000,000, divided into 20,000 shares of \$100 each. It is understood that the new company intends extending the line to Beattyville, Ky., as originally intended, and possibly into Eastern Kentucky.

Appointments on the Southern.

The following announcements are made by the Southern Railway Co. W. H. Green, to be assistant general manager; J. H. Barrett, to be general superintendent of transportation, in charge of train and station service, and the operation of motive power and rolling equipment; W. H. Peddle, to be general superintendent of maintenance, in charge of all matters pertaining to the maintenance of shops, machinery, motive power, cars, tracks, bridges and buildings.

Railroad Notes.

The Charleston & Western Carolina Railway Co. has consolidated its treasury and accounting department, with E. W. Mills in charge.

It is announced that the Norfolk & Ocean View road will be sold at auction on March 23 at Norfolk. W. W. Old and Caldwell Hardy are the commissioners of sale.

The monthly report of the Northern Central Railroad Co. shows a substantial increase in net earnings, it amounting to \$33,000. The increase for the eleven months of the year amounted to \$384,000.

The passenger department of the Seaboard Air Line has just issued two new illustrated books; one entitled "Education in the South," giving a full and complete list and description of schools, colleges and universities along the Seaboard Air Line; the other entitled "Winter Excursions via Seaboard Air Line," in which appears descriptive and illustrated sketches of the numerous winter tourist points reached via the Seaboard Air Line.

The freight business of the South Carolina & Georgia Railroad has increased to such a degree in the past twelve months that it has been found necessary to have five new and extra heavy engines. The two engines received are "compound consolidated" freight locomotives of the most approved type. They weigh 22,000 pounds each and have a capacity of driving fifty loaded cars. Each locomotive has eight driving-wheels four and one-half feet in diameter.

The January number of the Southern Field, issued by the Southern Railway Co., contains a variety of articles of description and information in regard to many places and localities. The illustrations are of a great cotton mill at Gaffney, S. C., showing the character of the factories in the South, and of Alabama's new and growing industrial school for girls. The Old Dominion is represented by articles on Danville, Norfolk, Alexandria and the Shenandoah Valley. There are also a number of interesting letters about various points in North Carolina.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

THE NEW ENGLAND MILLS.

No Complete Agreement About the Cause of Their Distress.

Beyond the refusal of the Fall River manufacturers to grant the request of the operatives to postpone the reduction of wages for two months, the extension of the wage-reduction area in Massachusetts and New Hampshire and the talk of resistance to the reduction, the cotton-mill situation in New England has remained unchanged during the week.

The propositions made by representatives of the labor unions were:

"First. It being the general opinion that there will be an improvement during the ensuing year, and that the manufacturers will be in a far more prosperous condition than at present, we request the manufacturers to postpone the proposed reduction until March 1. If there is no improvement at that time we will hold another conference with a view of settling the wage question.

"Second. Believing that reducing wages is not a remedy for an overstocked market, we respectfully request the manufacturers to work four days a week until March 1. If there is no improvement at that time, we will hold another conference.

"Third. If neither of the above propositions is accepted and we cannot settle the question satisfactorily, we are willing to submit our case to the State board of arbitration, wages to remain as at present until the State board makes its report."

To this the manufacturers replied as follows:

"The condition of the cotton-cloth trade is such that the mills in Fall River find it impossible to dispose of their output at such prices as will admit of any return whatever on the capital invested here. The competition which Fall River mills have to meet has been brought about in part by the philanthropy which the good people of Massachusetts have ever shown toward those of her citizens who have appeared to need her sympathies.

"The hours of labor in Massachusetts have been shortened more than in neighboring States and more than her manufacturers can stand. While such laws have apparently relieved the burden of the operatives in the factories, they have really worked to their financial disadvantage, because such laws have induced undue competition outside of Massachusetts, where hours of labor are longer and where every inducement is offered capitalists to invest.

"The South has modern mills containing most improved machinery and a very low cost of labor. The rest of the New England States, as well as the Southern States, have much longer hours and comparatively no supervision and no penalties for the infringement of the laws. Massachusetts, on the other hand, is handicapped by the shortest labor and extremely restrictive legislation compared with other and competing States. Mills must run and earn dividends for stockholders or there is no inducement for capital to invest in Massachusetts or Fall

River. Fall River mills are as well equipped with modern appliances and machinery as their competitors, and, with the same advantages in hours of labor and pay, would be able to compete with any section of the country.

"It must be evident to you, as it is to this committee, that there is no money for stockholders, nor for employees, either, when the mills are idle or running short time, and that it is useless for all the Fall River mills to do all the curtailing of production. When we stop our mills everyone else runs full time, and if a curtailment of production here brings about better prices, it is only temporary, and simply offers an inducement for capital to build more mills, not in Fall River, but outside of Massachusetts. We work against ourselves every time we stop our mills without the co-operation of the rest of the spindles of the country, and, in our opinion, our competitors would be willing to join with us in curtailing production only when Fall River is enabled to manufacture cotton cloth at as low a cost as is possible elsewhere.

"The facts are that Massachusetts mills work fifty-eight hours per week; the other States have sixty-hour laws for labor; the Southern mills run from sixty-six to seventy-two hours weekly, and, in some cases, run day and night. The cost of labor in the Southern mills is very much lower than in New England, and they claim advantages in water-power, taxes, cheap transportation and cheap cotton, as well as in longer hours of labor. Their mills are as good, but no better than ours, and the fact stares us in the face that they can undersell us in the markets on account of the lower cost of production.

"But reducing labor is not all. Some concerted action should be taken to see if legislation in this State can be made more friendly to its industries, so that capital may be induced to stay here rather than go outside. The employee and employer ought to work together and not clash through misunderstandings and jealousies. Their interests are identical. They each want a living out of this business, and whatever works to the disadvantage of one hurts the interests of the other. When it is considered that mills in Fall River and Massachusetts run less hours than in other States, and that it is necessary for us to meet such a close competition in trade under such adverse conditions, it seems to this committee that nothing is to be gained by putting off for two months more the date at which a reduction of wages should go into effect, and, inasmuch as the mills of Fall River have run during the past year or more under conditions so very discouraging and unremunerative, during which time we have tried the experiment of curtailment extensively, and the committee of manufacturers feel that the situation is such that they must adhere to their decision that it is absolutely necessary to reduce wages in Fall River mills 11 1-9 per cent., said reduction to go into effect on the third day of January, 1898, as voted by the manufacturers at a meeting held on the eighth day of December, 1897."

Time has been allowed, however, for a consideration of the propositions of the Arkwright Club's committee and various portions of them have been discussed pro and con.

The advantages of the South have been enlarged upon, but there seems to be no effort to recall a statement made by the American Wool and Cotton Reporter of last April. It said:

"Buyers declare that Southern goods are not only sold cheaper and at a real profit, but that there is a further gain of

5, 6 and 7 per cent. through the plan that Southern mills have adopted of paying the freight as far as the Mississippi river, to Chicago and New York. These facts have led Eastern mills of late to agitate a similar policy on their part, but it seems to be believed among buyers that they cannot afford to pay the more costly freights, when they claim that there is already no profit in the manufacture of goods. It is not the object here to discuss the subject of rivalry between Northern and Southern mills, or to fan any flame of jealousy between them. It is simply to get at the facts and face them. The growth of the cotton industry in the South is a source of national, as well as sectional pride, for the way is thus preparing for a greater rivalry between the new world and the old in an industry that belongs naturally to the new.

"It would appear that the South has even more advantages than those named, for buyers now maintain also that they would prefer Southern goods over those of Eastern make, even at the same price, claiming that they are as well made, that they are not impaired by calendering, and that the finish is the best adapted to conversion purposes. Buyers also for China and other foreign markets are extending their purchases of Southern three-yard sheetings and drills. Goods of the print-cloth grade, especially 64x64 cloths, have been and are serious competitors of Fall River. The quantity of these goods made in the South is very threatening. But they are equally successful in counts up to more than 100x100, and in the matter of plaids it is simply astonishing what excellent goods of that character they are enabled to sell at three cents a yard.

"The South is, of course, not yet the large factor in trade that the mills of the North are, and prices generally are not determined by the smaller powers, nor will they be for years yet to come. The business of B. B. & R. Knight alone, for instance, with their dozen towns of cotton industry, probably equals half of the production of the South, and a few Amoskeag mills would equal the other half, but this fact does not impair the handwriting that is being written on the wall. Next to the successful production of plain goods, there is much talk heard also about what is to follow in the land of sunny blessings. This is nothing less than the near establishment of bleacheries, dyeing and printing plants. One of the largest mills of Georgia has already bought ground in South Carolina for the purpose of setting up a bleachery, and it will be no small establishment, and it will not be long before it catches up some of the goods going northward for that purpose. That this much can be done and will be done can hardly be doubted from what is being said about it, and that the attention of buyers is being drawn more and more to this subject is evidence that ought to point out to mills less favorably situated the provisions they should make for the future."

The Southern Bugaboo.

In more than one quarter there is a disposition to dispute the position of the manufacturers about Southern competition. In fact, there is a tendency to regard that element as a scarecrow of straw. The Fall River Herald, which has viewed the present crisis in a conservative way, says:

"This is not the first time that the cotton factory employes of Massachusetts have been threatened with a reduction in wages because of longer hours and lower rates a good deal nearer home than are Georgia and the Carolinas. Whatever the truth may be, the claim has repeatedly been made that the Rhode Island mills run as long as they please and that

they do not pay the Fall River schedule. It has also been alleged that the laws relating to labor have not been as strictly enforced anywhere in New England as they are here, and it is said that in no centre is labor so well organized as it is in this city.

"For years the attention of the operatives has been directed to these varying conditions almost within their reach, and they have seemingly been satisfied to let them stand as they are. Under the circumstances, therefore, it is to be feared that it is too much to expect that they will cover magnificent distances in order to equalize conditions. But granting that they will satisfactorily dispose of the question of Southern competition in good season, what is to be said of Northern overproduction?"

"That is a matter which is fully as discouraging as Southern competition. If every Southern mill were wiped out today, there are evidences which go to show that the factories of the North would still be loaded down with a troublesome accumulation, and it is this accumulation to which the unheard-of figure of two and one-quarter cents for a yard of cloth must be attributed. Supply and demand are delicately balanced. It doesn't require a surplus of a million pieces of goods to affect the market. One small man in one small mill, who has a few pieces which he cannot sell at the current quotation, can break the cotton goods market of the United States of America. It has been done time and time again. Consequently, if the Southern bugbear is excluded from the controversy, manufacturers are still confronted with the problem of regulating the supply of too many spindles to the demand, and that is a problem that must be solved before there can be any permanent improvement in the business. It has been urged that it is necessary to seek other markets, but export statistics prove that corporation managers have resorted to that remedy to such an extent as to embarrass the Lancashire spinners, and they have likewise diversified their products. It is easy to make suggestions, of course, but sooner or later, there may have to be a more perfect organization among manufacturers as well as among operatives.

"It may be questioned, nevertheless, if the rivalry of the South is playing the all-important part in the depression in this section which is attributed to it. If it is, it is evident enough that a reduction of 10 or 11 per cent. in wages will not improve the situation. The margin will still be so largely in favor of the South, if the truth has been told concerning wages there, that she can easily undersell the North and make a profit. We presume that nobody would undertake to argue that the machinery which has found its way into the cotton belt is entirely responsible for the inactivity which prevails in New England. For instance, there was a call in this city, this week, for 176,000 pieces of goods at current quotations. These were orders which the South could not fill, because, if as claimed, she can produce 25 per cent. cheaper than the local corporations, she could afford to fill them at a much lower figure, and buyers are not trading with Fall River agents out of sympathy for them. If then, there had been a demand for 175,000 pieces of cloth, and but 100,000 pieces were obtainable, it is clear that prices would have advanced. The extent of that advance would have depended entirely on the urgency of the demand, and therefore cannot be computed. The same reasoning applies with equal force to all of the manufacturing centres in New England. Accordingly, the problem to be solved, is whether the stagnation is

more largely due to overproduction in the North, or to competition in the South. It goes without saying that both are factors, and it is also evident that if Southern competition is the more important factor, the proposed cut-down will not affect the situation in the slightest, unless it breeds a strike. That is, it certainly will not prevent overproduction in the North, and it will not rob the South of its market, inasmuch as it is not the purpose here to get down to a Southern basis. That is something that the companies of New England must do, if they are to hold their own with the factories below the war line, and that is something which they are not going to do. Therefore, one disturbing factor, whether it is the more important or not, is not to be removed. As stated, the other factor, which is overproduction in the North, will also be allowed to remain, unless the operatives resist the attack on the pay-rolls."

Calling for Explanations.

The Brockton Times adds to this: "It would seem that a few explanations are in order from the cotton manufacturers of Fall River, in view of their recent reported assertion that they are unable to compete with the Southern manufacturers. The belief is prevalent hereabouts that many of the cotton mills in the South are either owned or controlled by the men who control the mills in Fall River. If this be correct, the regulation of the wages paid in the Southern mills would appear to be in their own hands. As a matter of fact, it is not believed that the cotton manufacturers of Fall River are losing any sleep over the matter of the welfare of their employees. They always did pay beggarly wages, and they are not over-particular as to the class of people they employ. To them it is all the same, so long as the cloth is turned out and the yearly dividends roll in. The heart of the average Fall River mill-owner is composed in large part of flint."

The Boston Post says: "What does this Southern competition amount to, that the Arkwright Club alleges as a pretext for cutting down the wages of cotton-mill operatives in Massachusetts? Light is gradually breaking in through the fog in which the club committee left the matter. 'Are all these New England manufacturers,' asks the Charleston (S. C.) News and Courier, 'engaged in making coarse goods, or grades that compete with the grades made by the Southern mills?' Of course not. The Massachusetts mills make fine grades, altogether outside the competition of Southern manufacturers. It seems, then, that the Arkwright Club gentlemen hold it to be necessary to cut the wages of their operatives in order to meet a competition which does not exist. Is there not a good deal of humbug in the ante-Christmas—and anti-Christmas as well—proclamation of the Fall River mill-owners?"

And, in addition, it says: "As for the mills in the Southern States, who built and equipped them? Who is behind them today in their development? Who, indeed, but New England capitalists? We have faith that the enterprise and the resources which reach out so boldly from New England will not, at this late day, fail here at home. It may be that this is a crisis foretelling a revolution in New England industry; but, if this comes, New England enterprise will adapt itself to the situation and hold its ground as it has in the past."

Alluding to the passing of dividends by some of the mills, the United States Investor, of Boston, says: "In looking over the list of non-dividend payers, it will be found that it has not been alone Southern competition which has, in many instances, caused a cessation of dividend payments. Other causes have contributed,

the elimination of which would unquestionably do much towards replacing several of our cotton mills on a dividend-paying basis. In this connection it may be stated that unquestionably the present depression in certain lines of cotton goods has been made use of by certain mill managers to strengthen the surplus of their mills, as an excuse is herein offered for passing dividends, which act has now become so common as to create no special comment. Some mills which have passed their dividends, would unquestionably have continued them had it not been for the fact that several others had passed."

A Spread of Skepticism.

This skepticism seems to be spreading to the people. Thus an operative, writing in the Boston Journal of Commerce, says:

"While we all know that some mills in New England are not making money—perhaps a few are losing some—yet there are mills in the North doing fairly well today, as well and even better than in the South, with all its seeming advantages. The people of the South are poor, and will remain so as a whole for a long time to come. We should not envy them their long hours. We up here fifty years ago ran equally as long hours, and with as low wages as are paid in any part of the South today. The South in due time will tire of the long hours and will shorten them voluntarily, as many New England mills have done."

And President Tansey, of the Central Labor Union of Fall River, says:

"I tell you there are mills in this city that don't have to borrow much money to carry on their business, and we know them just as well as some other people. We'll show them in a few weeks what we know about the bluff they have been putting up about their mills being bankrupt. With all they have had to say about the mills not making money, we'll show them at least five corporations in this city that made money in the last three months and that the Iron Works mills are making money today."

"What is it to us that there are old mills here? Haven't the men who owned them taken the money from them and put it somewhere else where it would bring them more? Are we to blame because mills haven't been kept in repair and have been run for all they are worth for the benefit of stockholders of one day and not of another? Have we got to take the whole of the suffering?"

"We can show you that in mills where a liberal policy has been followed for ten years the mills are making a little even today, and those mills won't be rooted out by Southern competition in a day or a year. If the owner of the Iron Works mills builds modern mills and is disposed to pay fair wages, must we say that we will work for less because the owner of some other mills put his money in other places instead of in his old mill? Is that fair?"

"If the old mills can't stand the strain, why don't they shut up and go out of business, and not keep running at the expense of the women and children of this and every other New England community? You can't show us an instance where the treasurer or the overseer has been reduced in an old mill, because the mill was old, but we can show you hundreds of instances where the help in all the mills have been asked to be content with their lot, because somebody in some other mill has better machinery."

The Southern Operatives.

In the meantime, Mr. L. A. Coolidge, the Washington correspondent of the Boston Journal, is traveling through the Piedmont section bringing his journalistic training at the capital to bear upon

the situation in the Southern mills. His letters must be of interest to their Massachusetts readers, and the facts he records about the condition of operatives are enough to cause sensible men to ponder. They go far to explain the difference in wages in the North and South. Thus Mr. R. M. Oates, Jr., proprietor of the Gold Crown Hosiery Mills, who is thoroughly familiar with all stages of cotton manufacture, says:

"The operatives in the Charlotte mills are all natives. They have grown up right here, and every one of them has to be taught from the very beginning. It is true that our wages, as a rule, are not so large as farther north, but the difference is not so great as some imagine. I have in mind at this moment a case where my establishment paid twelve and one-half cents a dozen for a class of work which cost only three and one-half cents a dozen in Philadelphia, and I have been assured that there is a certain mill in New Hampshire where the Philadelphia rate prevails."

"Is there any tendency among the help to reach out for higher wages?"

"I might answer that question by saying that there is a tendency among them to earn more individually than formerly. They are becoming more efficient, and in piece-work they earn more. I am speaking more particularly now of my own mill, which is a hosiery mill. I cannot speak positively about any business than my own. Almost all my operatives are girls. I have only seventeen men in my whole place. Girls who used to be satisfied with \$4 a week are not satisfied now unless they make \$5 a week. This, of course, does not make any difference in the labor cost. The work is all by the piece, and the increased earnings result from more efficient labor."

"At the same time the tendency is toward a decrease in the expense of living. The operatives everywhere in this region live better at a lower cost than they lived ten years ago. You will see men walking down the street Saturdays with chickens stuck under their arms. Such a thing used to be unheard of. You would be surprised to know how cheaply people can live. I have in mind the case of an old woman in my employ who lived on the outskirts of the town and who earned seventy cents a day. She told me her entire living expenses for a week were sixty-five cents. That was the outside limit. Just think of it; nine cents a day! And she was well and hearty. Her house rent was, of course, free."

"Then, too, entire families work in the mills. I have a family in my employ consisting of six people who draw out of the mill \$90 a month among them. Now, that is not bad. You will find a great many people who regard themselves in comfortable circumstances who don't have more. You see, that is more than a thousand dollars a year; and when one considers the living expenses, there is a really handsome profit. There is no such thing here as a 'company store.' People buy where they please, and they buy cheaply."

"Rent is not a serious item in the cost of living. The mills used to give their houses to the operatives rent free. That was when the operatives worked twelve hours a day. The mill-owners got together and reduced the hours of labor to eleven a day, and at the same time began to charge a small rent of twenty cents a week for every room. This, of course, amounted to a slight decrease in wages."

"There was no legislative enactment to bring this about. It was a free-will movement on the part of the manufacturers, done of their own accord, an arrangement among the employers them-

selves. We have had two attempts at legislative interference with the hours of labor, but they amounted to nothing; neither is there any tendency toward labor organization. We simply will not permit it. And when I say 'we' I mean the hands as well as the manufacturers. The hands themselves oppose outside interference, and for the reason I have hinted at. They realize they can't expect to work fewer hours of labor and get the same amount of wages. When the bills reducing the hours of labor were before the legislature the employes held meetings and signed petitions urging the legislature to let them alone. They virtually told the legislature it was none of their business."

Complementary to this is the interview with Capt. W. S. Mallory, secretary and treasurer of the Louise Yarn Mills, in which he said:

"Our labor here is native. I am frank to say that we keep the New England element out. Why? Because it means unions and strikes. I can show you a hundred letters from union bosses. I won't take one of them, because it means union or strike. This labor element is much larger than New England has any idea of. . . . A man named Howard came down here to organize labor unions. One was organized at Atlanta and one in Augusta. He quit here in disgust. The hands here told him: 'The treasurer and superintendent of our mill are the best friends we ever had. They pay our doctor's bills for us, they lend us money, and they help us out whenever we go to them. Of course, we would like to have more money, we would like to have our condition bettered, but our employers are better friends than you are. If our arms get broken, if we are laid up with sickness, shall we get our money from you? And if not from you, who is going to give it to us?'"

"In my experience of ten years I have never had a strike or any trouble. I have known hands to quit. That is the trouble with our help. They love a change. . . . When I started the Alpha Mill, ten years ago, we went on to 26 yarns. That was considered an exceedingly fine yarn for the Southern States. The hands I hired came from mills which had been running on 10s and 12s; they had never had any experience in finer grades, but in one month's time they could make 26s of just as good quality as New England make. Take the Atherton Mill, take the Lincolnton Mills, the Alberta Mill, they went on to 50s and 60s, and with the same class of labor that made 26s in my mill ten years ago, are making 50s and 60s now; 60s are about as high as they go. Then we are going into a new department of goods. We are making sateen, and New England men who have been down here say we can make a better line of goods than they make. We have an advantage in having nothing but new machinery."

"Another point about our operatives. If ever I want to run the mill until 9 or 10 at night and say we are pushed on an order, not a word is said. They will run it. Now, you can't get a New England operative to run beyond the ten hours. Let a circus come to town. If the hands come to me and say: 'Can't we go to the circus tomorrow?' and I reply, 'No, you can't, because I am bound to finish an order; when the next circus comes, you may go,' not a word is said. . . ."

"A man can live in Charlotte on seventy-five cents a week. I'll tell you why. Every man who owns a house has a lot for a garden. Then he can buy a peck of meal for fifteen cents, three and a-half pounds of meat for thirty cents and enough of sugar and other things. Some

of my night watchmen used to be bricklayers, getting two and two and a-half a day. They were a little disposed to doubt this cheap living, but one of them came to me the other day and said: 'You are right. I have a wife and two children, and my living expenses, what I buy to eat, have not exceeded \$2 a week for the last year.' I don't mean his clothes, but his simple living expenses."

"We charge twenty cents a room a week. If he takes a four-room house, it is eighty cents a week—just about enough to pay interest on the money. Clothing is the same all over the United States. It depends upon what he buys."

Has Come to Stay.

A sensible view of the situation is that of Geo. A. Chace, of Fall River, treasurer of the Bourne Mills, who, in announcing his acceptance on trial of the committee's new schedule, notified the employes that under the profit-sharing system, which has been in vogue at the mills for more than eight years, they were to receive as a bonus 4 per cent. on the wages they had received between June 14 and December 11, and that he would contribute \$500 toward a sick and benefit fund. In his circular he said:

"More than 4,000,000 cotton spindles are reported in the Southern States. Fall River has less than 3,000,000 spindles. As an American citizen, I must congratulate the people of the South. A successful cotton factory is a blessing to a community. The spread of factories in any part of our country means advancement in civilization and comfort among the people. I cannot believe that Southern competition offers a real menace to our industries. On the contrary, the distribution of wages among the people there will tend to higher standards of living and eventually create a demand for the fabrics which Northern mills will continue to supply. Temporarily, the Southern manufacturer has a show of advantages. Under normal conditions of business activity the Northern manufacturer can offset it."

"The South has proximity of cotton, free water-power, cheap fuel, low taxes or no taxes, long hours of labor, low wages, old-fashioned laws, new machinery in many cases, night work, and submissive employes; the North has proximity to capital, good credit, economies of power and fuel, public conveniences and protection, experience, skillful employes, advanced laws, concentration, invigorating atmosphere and stimulating environment, proximity of markets, and intelligent workmen who have learned to know and protect their rights. The Southern competition has come to stay. It is foolish to ignore or belittle it. The Northern mills are hard pressed in the race, but it would be weak to go backwards. The only way to win is to keep ahead."

NO NEED OF A FIGHT.

Mr. H. S. Chadwick's View of the Cotton-Mill Situation.

One of the most interesting contributions to the Boston Journal's enterprising treatment of the cotton-mill situation is an interview in the paper from Mr. H. S. Chadwick, of the Charlotte Machine Co., who was on a business trip to Boston. He is in a position to view both sides of the controversy calmly, and his words carry much weight. He said:

"Years ago New England manufacturers conceded that the South had advantages in the production of coarser cotton fabrics—three and four-yard goods. During the last three years a most surprising development has been attained in the production of print cloths and convertible goods of like organization, but

varying in width from twenty-eight to fifty-one inches. Competition has been particularly close in that class of convertible goods, designated in trade as 64x64 and 68x72, averaging about thirty-nine inches in width. At the same time, three, four and five harness goods are being successfully made, using numbers from 28 to 34 warp, and 36 to 44 filling yarns."

"It is useless for Northern manufacturers to deny that these fabrics are equally as good as those made in Northern mills. The customers who have in the past used these goods, still continue to purchase them. I have yet to learn that any have deserted the Southern for the Northern goods. The recent comment that some losses had been sustained by Southern mills by reason of the conclusion of customers that the argument used by those seeking to introduce Southern goods into Northern markets, that the Southern goods were 'just as good as Northern,' was no longer effective, is most positively erroneous. With hardly an exception, the mills of the South that produce the class of goods above referred to, have been built and equipped within three years. The buildings and machinery are of the most modern type. The speed of the machinery will compare favorably with that of the Northern mills."

"I admit that our operatives lack, to a certain extent, the skill that comes from long experience, but they are eager to learn and are making remarkable progress."

"It has frequently been said that the labor employed in our mills is made up almost entirely of native Americans. This is absolutely true. Of Scotch-Irish descent, inheriting many of the frugal and industrious characteristics of the Scotch, coupled with the aggressive spirit of Americanism, our mill operatives, although handicapped with the peculiar conditions that have surrounded them in the past, and by the limited field of employment heretofore open to them, are rapidly moving along the road of progress."

"Among the Southern mills it has become a regular part of the local development to establish, either on the mill property or in close proximity to the same, churches and schools. The manufacturers recognize the importance of providing all possible moral and intellectual instruction for the persons in their employ. A better class of dwelling-houses for the operatives is also building. The fact that these houses compare unfavorably with the dwellings in Fall River and New Bedford does not reflect discredit upon either the operatives or the manufacturers of the South."

"It must be borne in mind that our operatives possess certain advantages in the matter of cheap living, and the climatic conditions greatly favor them. They have always been accustomed to a mode of living different in many essentials from that of the average cotton-mill hand in the North. For the time being it is unnecessary to enter into a discussion of these conditions. The simple fact remains that they exist, and are factors that must be carefully weighed in making any estimate of the comparative conditions of the manufacturing of the South and of the North."

"I do not for one moment contend that there is likely to be an exodus to the South of surplus capital, on the one hand, or of existing manufacturing plants on the other. But I do say unhesitatingly that conservative investors in this section are bound to recognize the natural advantages that the South possesses. Hence, naturally, these investors will follow their convictions with capital. It seems to me that this is a perfectly natural proceeding. Surely neither New

England nor any other section of the country can hold a patent right upon any class of business."

"The South offers to investors in cotton manufacturing certain evidences of a satisfactory return, owing to the conditions that have been explained elaborately in the press of late, and that will surely result in largely-increased investments. Much capital has already gone from this section to the South, and more is destined to follow at a very early date."

"Some complaint has been made that the newly-organized mills of the South are slow in the payment of dividends. It should be borne in mind that, of necessity, the development of a cotton mill in a Southern town, where it represents perhaps the only industrial enterprise, is attended with not a few difficulties. In any community public confidence is most important. The further fact that the mills thus far erected in the South are the product, more or less, of a spontaneous effort on the part of the people to improve their condition and to utilize the natural advantages of their respective localities, is also worth bearing in mind."

"The competition between the North and the South is purely one of locality. It is not an industrial fight. Both New England and the South have certain advantages. Cotton is not a factor in this competition at all. Cheaper labor and cheaper living favor us in the South. In this respect the North cannot compete with us. The North has the advantages of experience in manufacturing on the part of managers and superintendents, of skilled labor, lower freight rates, proximity to markets, climatic conditions that are particularly favorable to the manufacture of the finer grades of goods, and banking facilities—the means of securing money at all times for the purchase of cotton and the holding of the manufactured product, when deemed advisable."

"The comparatively limited resources of the South oftentimes work serious disadvantage to the manufacturer of cotton. The rates of interest are higher, and money is generally employed, tied up, or, to put it in another way, there is little or no surplus capital in the South. Here, in your banks, you have hundreds of thousands of dollars lying idle, awaiting investment. So, one of the most embarrassing things with which we have to contend in the South is an inability to get money when we want it."

ECONOMY IN SHIPMENTS.

A Record-Breaker in Round-Bale Transportation.

The Cotton Ginners' Journal, of Waco, Texas, is enthusiastic over a recent shipment of the new round bales from that point and describes it as follows:

"Another and a remarkable demonstration has just been made of the potentialities, as to economy, involved in the shipment and handling of the cylindrical bales produced by the system of the American Cotton Co. This illustration was furnished in a shipment made from the Waco plant of the above company, on November 2, via the Cotton Belt Railway, to East St. Louis."

"A box-car of the Illinois Central Railway was selected out of a number of empties in the Cotton Belt yards. It was not sent here for the purpose. It came loaded with furniture, to be sent back in the ordinary course of business, but, as it appeared to be slightly more capacious than other cars in the yard, it was taken and switched to the loading platform of the round-bale plant."

"The work of loading began at 7.10 and was concluded at 8.30 P. M., one hour and twenty minutes, by which time

165 of the round bales had been neatly bestowed in the car, stood on end and two high. Then the car was closed, sealed and a bill of lading given for the contents. The 165 bales weighed 70,247 pounds, averaging slightly over 425 pounds each. It was the heaviest shipment of cotton, baled or unbaled, ever made by the American Cotton Co. or any other shipper, in one car, over the line of any railway company, and those who watched the loading and saw the result were surprised, for it exceeded the expectations of the round-bale people who made the shipment. As for the railway officials, they were astonished. It was known, of course, that a considerably larger number of round bales, owing to their uniform size and general compactness, could be loaded in a car than of compressed square bales, but such a result as this was beyond anticipation.

"This shipment is an object-lesson and its significance cannot be overestimated. It shows the advantages, as to handling and hauling, the cylindrical bale offers to the railways. We have dealt with this purely as a news item, refraining from comment or elaboration, preferring to let all who are interested do their own thinking. The news of this record-breaking shipment will go all over the world."

ENDORSED BY GROWERS.

A Special Committee's Report on the Round Bale.

An outcome of the recent convention of cotton-growers at Memphis is the following endorsement of the round bale:

"As a committee of cotton-growers, requested to act by Hector D. Lane with him in investigating the merits and demerits of the round-bale system as an economic innovation applying to the handling of cotton, we beg to report as follows:

We find that in the use of the cylindrical bale there is a saving in bagging and ties (as no ties are used and the wrapping is made of cotton) of at least.....	\$ 50
Saving per bale in handling, weighing and compressing, at least.....	75
Saving per bale in storage at market warehouses, at least.....	20
Saving per bale in insurance, at least.....	15
Saving per bale in freight, at least.....	50
Increase in value to spinners per bale, at least.....	1 00
Large savings are also made in shipping to foreign markets by reason of saving in screwing in hold of vessel, per bale of at least.....	25
Saving per bale by loss of weight in sampling, at least.....	25
Total.....	\$3 60

"We recommend most heartily this system by reason of the fact that cotton is being used to cover the bales, thus using up our own product, instead of going to India for our bagging and to Liverpool for our ties, both of which are controlled by a trust and affected by high tariff. Respectfully submitted,

"HECTOR D. LANE,

"Alabama.

"W. E. FERGUSON,

"Arkansas.

"CHARLES E. HOOKER,

"Mississippi.

"HUGH D. GREER,

"Tennessee.

"T. W. PRATT,

"Alabama.

"B. F. PASSMORE, M. D.,

"Mississippi.

"Committee.

"Memphis, Tenn., December 21, 1897."

To Remove to Tennessee.

Dispatches dated at Providence, R. I., make the announcement that the British Hosiery Co., of that city, will remove a part of its establishment to Nashville, Tenn. The Southern branch is to be used for the production of cotton goods. The British Company has its Rhode Island mill at Olneyville, where its equipment includes three sets cards, three

combs, 2500 worsted spindles, ninety knitting machines and 100 sewing machines, producing full-fashioned cashmere and cotton hosiery, and employing 500 operatives. Mr. R. W. Cooper is president.

The Cotton Movement.

According to the report of Secretary Henry G. Hester, of the New Orleans Cotton Exchange, Northern mills have taken between September 1 and December 24 1,188,563 bales, an advance of 264,339 over those of the same period last year, and Southern mills 440,482 bales, an advance of 18,122 bales. The amount brought into sight was 6,861,566 bales, an increase of 574,952, and the total supply shows an increase of 552,957 bales. The exports increased 398,900 bales, though Great Britain's takings were 78,972 bales less than those of 1896.

Textile Notes.

The Lynchburg Cotton Mills, of Lynchburg, Va., have declared a semi-annual dividend of 4 per cent. and passed \$22,000 to the company's reserve fund.

Messrs. A. J. Baldwin & Co., of Dawson, Ga., think of establishing a mill for the production of cotton rope, and are now investigating machinery, etc.

Messrs. Shivers Bros., of Crockett, Texas, contemplate the establishment of a hosiery knitting mill, and are now investigating regarding the equipment necessary.

Mr. L. O. Way, of Blackfork, Ark., contemplates establishing a mill for the production of common fabric, and is now investigating machinery and obtaining estimates on equipment.

Literary Notes.

Following the Equator. By Mark Twain. The American Publishing Co., Hartford, Conn.

When the "Innocents Abroad" appeared several years ago the reading public learned that it was possible for a man to follow well-worn paths of travel and describe his experience in a fresh light, even extracting humor from a guide-book. No longer innocent, Mark Twain has taken another route with his notebook, and, turning his back upon the effete civilizations of Europe, has investigated the habits of the denizens, native and transported, of the islands of the South Sea, India and Southern Africa. The result will hardly serve as a guide-book, but it will serve to point the way to an hour or two of unmitigated pleasure. The book is thoroughly Twainesque and it is profusely decorated by the pencils of Beard, Frost, Clinedinst, Dielman, Newell, Senior, Fogarty, Warren, Reinhart, Smith and Gilbert.

Hawaii: Our New Possessions. By John R. Musick. Publisher, Funk & Wagnalls Co., New York and London.

Though a little forehanded in his title, Mr. Musick, in selecting it, doubtless had in mind the fact that its date of publication would be 1898. He has made a journey to each of the islands of the Hawaiian group, has visited every point of interest on them, and has presented, as a result of his careful observations, an entertaining account of the history, industries and resources of the country. He has aimed at truth, and has selected what seems most reliable from both sides of the story of Hawaii. A number of handsome illustrations are in the volume, which will probably be widely read in view of the measures now under consideration for the annexation of the islands.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., December 28.

The holidays have interfered with business, as is usual at this season of the year, and trading at this writing in the cotton-oil market is dull. Earlier in the week, however, considerable activity prevailed, and we heard of several important sales of prime summer yellow at 21½ cents. Prices are slightly easier, and while there is not much uncovered December export business, considerable interest is evinced for January, now almost at hand. The weakness referred to arises from pressure to sell recent arrivals, but the mills generally are firm in their views, and the market presents no specially new feature. Stocks of crude are decidedly light. Tank crude is steady and in good demand at 14½ cents, Atlantic points, while Mississippi valley is quiet at 14½ to 15 cents, and Texas doing a fair Western and Mexican trade on a 14-cent basis. It is reported that a considerable quantity of crude has been purchased by foreign soap-makers direct from Southern points at last-named quotation. Concerning sales of summer yellow, about 8500 barrels were sold for the week. Today sales were made at 21½ cents of this grade, but for prompt delivery only, 21¼ to 22 cents being the quotation. A heavy deficit in the receipt of hogs at Western packing centres has strengthened lard still further, and 4.72½ cents is quoted for May delivery, Chicago. The compounded article is firm at this market at 4 cents. Tallow is firm, but dull, at 3½ cents. The closing quotations are as follows: Crude, 18¼ cents; crude, loose, f. o. b. mills, 14 to 15 cents; summer yellow, prime, 21½ to 22 cents; summer, off grade, 21¼ to 21½ cents; yellow, butter grades, 26 to 30 cents; white, 24½ to 25 cents; winter yellow, 27 to 27½ cents; salad oil, 28 to 30 cents, and soap stock ½c. to ¾c. per pound. Liverpool refined oil is dull, but firm, at 14s. 9d. The action of the French Chambers in enforcing a prohibitory duty on hog and lard products it is feared will affect the cotton-oil trade with that country, and developments are awaited with considerable interest here, and, notwithstanding the passage of the measure through the lower house, it is hoped that sufficient influence will be brought to bear to kill it before being made law. Exports for the week amount to 5300 barrels, and receipts 11,670 barrels. Mills in some sections of the South are reported as being well sold up and not offering much crude in tanks. There has been a better demand for the latter variety at this market than any other grade, the refined varieties being dull.

Cake and Meal.—From London we have the report that American cotton cakes are very scarce, and for immediate delivery command £6 5s., but for early January arrivals £5 15s. is quoted. Liverpool quotes prime new £5 10s. Heavy consignments have been made to the latter port from New Orleans and Galveston since our last. At this market there is very little doing in meal, an arrival of 400 bags comprising the receipts for the week. Quotations here are \$19.50 to \$20.50 per ton.

Cottonseed-Oil Notes.

The Houston Post gives the following quotations for cottonseed products: Prime crude oil, loose, 13 to 14 cents, and

prime summer yellow oil, 16 cents; prime cottonseed meal and cake, \$12.50 to \$14 per short ton; linters, 1¼ to 2¼ cents per pound, all f. o. b. mill Texas interior points, according to location.

Gen. Horace Porter, ambassador of the United States to France, in an informal communication to this government expresses great gratification at the result of his negotiations with the French government relative to the duty on cottonseed oil. A proposition was made to levy on that oil what would have amounted to a prohibitive duty, but after some discussion it was defeated in the Chamber of Deputies.

The Southwestern freight bureau, at St. Louis, has published the following rates on cottonseed oil in tank cars from Texas common points, Houston and Galveston: To St. Louis, 28 cents; Memphis, 23 cents; Omaha, 33 cents; Louisville, 31 cents; Kansas City, 28 cents; Cincinnati, 35 cents per 100 pounds, usual differentials applying in making rates from points in Texas taking higher than common-point rates and to points in defined territories.

The market for cottonseed products in New Orleans last week was quiet, with values unchanged. There is a better demand for cottonseed meal and cake for export. The following were quoted as receivers' prices last week: Cottonseed, \$7 per ton (2000 pounds) delivered to the mills; cottonseed meal jobbing at depot, \$16.25 to \$16.50 per short ton, and \$18.25 to \$18.50 per long ton for export f. o. b.; cottonseed oil, 15 to 16 cents per gallon for strictly prime crude; in bulk, 13 to 14 cents, and 20 to 21 cents for refined oil at wholesale or for shipment; oilcake, \$18.25 to \$18.50 per long ton f. o. b.; linters—A, 2¼ cents per pound; B, 2½ cents; C, 2¼ cents; hulls delivered at 10 to 12 cents per 100 pounds, according to the location of the mills.

Alabama's Mineral Output.

In a review of Alabama's mineral resources, Mr. William M. Brewer notes in the Birmingham Age-Herald that 15,000 persons have been engaged in the various industries during 1897 and that the output has been as follows: Coal, 5,657,066 tons; coke, 1,225,199 tons; pig iron, 857,439 tons; iron ore, 2,050,014 tons; limestone, dolomite, for flux, 372,653 tons; building stone, 42,160 cubic feet; bauxite, 12,000 tons; lime, 150,000 barrels; common brick, partial product, 15,150,000.

Alabama's Coal Business.

The principal mining companies of Walker county, Alabama, have advanced the wages of their miners to the rate of seventy cents per ton. This is the amount the men received before the reduction made during the business depression. A dispatch from Birmingham states that the demand for the output is simply phenomenal, and the mines are endeavoring to secure additional men. There never has been a time in the history of the coal business in Alabama when it was as good.

The Georgia Saw Mill Association held a meeting in Cordele, Ga., last week to take action upon the matter of the rulings made by railroads on cars loaded with lumber. A committee was appointed to confer with all the roads interested at Atlanta on January 3. In case the roads will not remove the restrictions, the matter will be taken before the railroad commission.

It is announced that the Florence Land, Mining & Manufacturing Co., of Florence, Ala., has been reorganized, with N. C. Elting, cashier of the First National Bank, as president.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., December 30.

The volume of business in the local lumber market during the closing week of the year has been very limited in character, especially in sales to city concerns. Yardmen, planing mills and boxmakers are buying only in small lots, and, as usual about the close of the year, endeavored to enter the new year with stocks of lumber reduced to a minimum. Receipts of lumber are largely increased by arrivals this week, and stocks at the close of the year are generally ample for all requirements. The most interesting feature of the market is the increased demand for kiln-dried North Carolina yellow pine, both for home consumption and for foreign export trade. Orders for kiln-dried yellow pine have been coming in quite freely recently, especially from Great Britain and the Continent. Stocks of this wood are not excessive, and the demand from all sources is very decided, with holders firm in their views as to prices. The outlook for a good trade in kiln-dried yellow pine during the coming year is considered very encouraging. In the hardwood business there is a fairly active demand from local concerns, as well as from out-of-town buyers. Leading hardwood exporters report business in their line as greatly improved, with prospects for 1898 decidedly good.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE		
5-4x10 No. 2, kiln dried.....	\$12 50@	13 50
5-4x12 No. 2, kiln dried.....	14 00@	15 00
4-4x10 No. 1, kiln dried.....	15 00@	16 50
4-4x12 No. 1, kiln dried.....	15 00@	16 00
4-4x12 No. 1, kiln dried.....	15 00@	14 00
4-4 wide edge, No. 1, kiln dried.....	17 50@	18 50
4-4 No. 1 edge floor, air dried.....	23 00@	24 00
4-4 No. 1 edge floor, air dried.....	12 00@	13 00
4-4 No. 1 edge floor, air dried.....	10 00@	11 00
4-4 No. 1 12-in. stock, air dried.....	15 00@	16 00
4-4 No. 2 12-in. stock.....	12 50@	13 50
4-4 edge box or rough wide.....	8 00@	8 50
4-4 edge box do. (ord. widths).....	7 00@	7 50
4-4 12-in. rough.....	9 00@	9 50
3/4 narrow edge.....	5 50@	6 50
3/4 wide.....	6 50@	7 50
3/4x9 1/2 and 10 1/2-inch.....	7 50@	8 50
Small joists, 2 1/2-12, 14 and 16 long.....	7 50@	8 50
Large joists, 3-16 long and up.....	8 00@	9 00
Scantling, 2x3, 2x4 and 3x4.....	7 00@	8 00

WHITE PINE		
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4.....	\$47 00@	48 00
3d clear, 4-4, 5-4, 6-4 and 8-4.....	42 00@	43 00
Good edge culls.....	14 50@	15 50
Good stock.....	16 50@	17 50

CYPRESS.		
4-4x6, No. 1.....	\$19 50@	20 50
4-4x6, No. 2.....	13 50@	14 50
4-4x6, 16 feet, fencing.....	10 00@	11 00
4-4x6, rough.....	8 50@	9 00
4-4 rough edge.....	8 00@	8 50
4-4 edge, No. 1.....	16 00@	17 00
4-4 edge, No. 2.....	12 00@	13 00
Gulf, 4-4, Nos. 1 and 2.....	25 00@	29 50
Gulf, 6-4, Nos. 1 and 2.....	28 00@	30 00

HARDWOODS—WALNUT.		
5-8, Nos. 1 and 2.....	\$65 00@	75 00
4-4, Nos. 1 and 2.....	80 00@	90 00
5-4, 6-4 and 8-4.....	85 00@	95 00
Newell stuff, clear of heart.....	85 00@	100 00
Culls.....	20 00@	30 00

OAK.		
Cabinet, white and red, Southern, plain-sawn and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	\$30 00@	34 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	53 60@	55 00
Culls.....	10 00@	15 00

POPLAR.		
Nos. 1 and 2, 5-8.....	\$24 50@	25 50
Nos. 1 and 2, 4-4.....	28 00@	30 00
Nos. 1 and 2, 6 and 8-4.....	32 50@	33 50
Culls.....	11 50@	12 50

SHINGLES.		
Cypr., No. 1 h'ts, sawed, 6x20.....	\$6 25@	7 00
No. 1 saps, sawed, 6x20.....	4 75@	5 00
No. 1 hearts, shaved, 6x20.....	6 00@	7 00
No. 1 saps, shaved, 6x20.....	4 75@	—

LATHS.		
White pine.....	\$1 90@	2 10
Spruce.....	2 10@	2 15
Cypress.....	1 55@	1 65

Charleston.

[From our own Correspondent.]

Charleston, S. C., December 27.

The lumber market here has been

rather quiet during the past week, and the volume of business confined to narrow limits. The demand, as usual at this period of the season, is not so decided, as lumbermen are about settling up the affairs of the year, and very little activity is expected until late in January, 1898. At Georgetown and other milling points, however, the various mills are all busy, and stocks are becoming better assorted in order to be prepared for any sudden demand that may arise. The demand for all desirable grades of lumber on Saturday last was light, while for export there was a fair inquiry. Merchantable lumber was quoted at \$14 to \$16 for city-sawn, \$12 to \$14 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. Shingles are firm at \$4 to \$7 per thousand. During the week the following vessels cleared: Steamer Pawnee for Boston with 6403 feet of lumber; for New York steamer Algonquin with 15,580 feet; schooner George R. Congdon with 321,000 feet, and barkentine E. S. Powell with 468,000 feet. The steamship Agnes cleared for Honduras with 50,000 feet of lumber. The total exports of lumber and timber from September 1, 1897, to December 24, inclusive, amounted to 14,906,919 feet coastwise and 275,000 feet foreign, making a total of 15,181,919 feet, against 18,958,178 feet last year. Coastwise lumber freights are steady, with rates unusually low; to New York, \$4.38 to \$4.50; wet ties to Perth Amboy, 15 cents each, basis forty-six feet; dry railroad ties to New York 11 1/2 cents each, basis thirty-six feet; lumber to Fall River, \$4.50. A schooner, 373 tons, was chartered last week to load lumber at Georgetown, S. C., for New York at \$4.37 1/2.

Savannah.

[From our own Correspondent.]

Savannah, Ga., December 27.

The year closes with a fairly active lumber market, and the demand during December has been quite pronounced in nearly every line of material. Prices for all desirable lumber are firm and holders are not disposed to make concessions in order to effect sales. All accounts from interior milling points are very satisfactory, showing an active demand for lumber from all the usual sources. At Cordele a meeting of Georgia lumbermen was held last week, when it was decided to issue a new schedule of prices, which, it is said, will be rigidly maintained. From nearby ports of Brunswick and Darien shipments of lumber for the month of December have been larger than usual, and all the mills are well supplied with orders, while stocks are light, the output being shipped almost as fast as cut. There is a good crosstie trade reported and the demand continues active with large shipments to Northern points. During the past week the following clearances from this port were reported: Schooner Frank Vanderherchen for Philadelphia with 392,850 feet of pitch-pine lumber from John A. Calhoun, and schooner Margaret A. May for Baltimore with 373,313 feet and schooner Rebecca M. Walls for Philadelphia with 393,480 feet. The schooner J. E. Du Bignon cleared for New York with 477,452 feet of pitch-pine lumber from E. B. Hunting & Co. The bark Vanadis cleared for Vanadis with 264,481 feet of boards, deals and flooring among her cargo. New York steamers took out 245,000 feet of lumber, Baltimore steamers 125,038 feet and Boston steamers 8900 feet of lumber and 4000 staves. The schooner Aaron Rippard cleared for Philadelphia with 180,231 feet of timber and 186,454 feet of lumber. There is a moderate offering of desirable tonnage

and rates on lumber are generally firm. Foreign business is more or less nominal. The rates from this and nearby Georgia ports are quoted at \$4 to \$4.50 for a range including Baltimore and Portland, Me. Railroad ties, basis forty-four feet, to Baltimore, 12 cents; to Philadelphia, 13 cents, and New York, 13 1/2 cents. To the West Indies and Windward rates are nominal; to Rosario, \$12 to \$13; to Buenos Ayres and Montevideo, \$10 to \$11, and to Rio Janerio, \$14; to Spanish and Mediterranean ports, \$11.30 to \$11.50, and to United Kingdom for orders, nominal for lumber at £4 5s. per standard.

Jacksonville.

[From our own Correspondent.]

Jacksonville, Fla., December 27.

The present month has been unusually active in all wood products, and the movement in lumber has been so far of greater volume than in any month during the year about to close. Year after year the exports of wood products show a marked increase, giving greater importance to this port as a port of entry. The lumber market at the moment is showing unusual activity, and mills are all running on full and some on overtime in order to clear their contracts. So far during the month the shipments of lumber amount to over 11,000,000 feet, and the probability is that they will reach nearly 12,000,000 feet before the month closes, as a number of vessels are now in port loading lumber for various ports. The total shipments of lumber for 1896 amounted to 96,128,995 feet, while for the present year the figures will reach 109,000,000 or over. The work of deepening the St. John river and removing the bar has given most favorable results, and if continued will soon give the deepest draught vessels access to our wharves and docks. The lumber industry here was never in so promising a condition, and already there are rumors of improvements to several milling plants in order to increase their capacity. At the moment there is every prospect of a better foreign demand for lumber, and during the past week several good foreign orders have been filed. Lumber freights continue steady, with a moderate offering of tonnage. Among the charters reported in New York during the week were a schooner, 360 tons, hence to Surinam with lumber at \$5.25 and port charges, and schooner Methebesco, 318 tons, hence to Boston with lumber at \$4.87 1/2, or Portland at \$5.

Mobile.

[From our own Correspondent.]

Mobile, Ala., December 27.

The general business of this port at the moment presents a scene of unusual activity along the wharves and docks. Receivers and shippers alike have all they can do to keep up with the procession, and the year closes with a very promising outlook. In lumber and timber this is to a great extent applicable, the improvement in this industry being quite marked during the present month. Hewn timber when placed on the market will bring 12 to 12 1/2 cents per cubic foot, basis of 100 cubic feet, average B1 good. Contracts are made at 12 1/2 cents. Hewn oak is dull at 18 cents for first-class, and hewn poplar is in limited demand at 10 to 11 cents per cubic foot for large average girth. Sawn timber is quoted at 10 1/2 to 10 3/4 cents per cubic foot, 40-foot basis, with contracts nominal. Cypress is in demand at 5 to 8 cents per cubic foot, according to average. There is a fair demand for saw logs at \$5 to \$7 for pine delivered at mill. Among the clearances of lumber during the week were 1,569,698 feet, distributed as follows: Cuba, 355,270 feet; Central

America, 177,000 feet; Jamaica, 195,000 feet; New York, 357,412 feet, and Buenos Ayres, 485,016 feet. There is a good demand for lumber, and mills at this and adjacent points are all busy, being well supplied with orders. Timber shippers are not doing much, as usual at this period of the season, but later on expect to be quite busy, there being a number of inquiries on the market for business during January. Freight rates are steady for lumber, with rates to the West Indies, Cuba and River Platte unchanged. A schooner, 714 tons, was chartered in New York last week to load lumber here for that port at \$5.50.

St. Louis.

[From our own Correspondent.]

St. Louis, Mo., December 27.

The volume of business in all avenues of the lumber industry here is quite limited, as usual at this period of the season. The wholesale firms are doing very little trade just now, and during the past week the extreme cold wave which passed over has precluded the possibility of handling lumber to any great extent. The mills in the Southwest have also been restricted in their operations by prevalent climatic conditions. Yellow pine sales are decreasing, but considerable stock is going into consumption to fill old orders, while local mills report a light business. There is more doing in hardwoods, and in this line the volume of trade is well maintained, but bad weather has even restricted operations in this line. Stocks, however, are being held down to a minimum at this season, and later on there will be a fairly active trade. It is thought by some that the hardwood trade during 1898 will be unusually large. Receipts have been liberal during the past week, and yard stocks are in fair shape, while yardmen are generally taking all the offerings. There is a good demand for oak and all desirable grades are scarce at mills. Prices for oak are very firm and dealers look for an unusual demand early in the new year, with a corresponding advance in prices. Poplar is in fair request, with moderate receipts and prices firm. There is a good outlook for cottonwood, and, with light stocks at mills, prices are well maintained. Walnut and ash are moving slowly, but the demand later on will be active.

Lumber Notes.

The Litcher & Moore Lumber Co., of Orange, Texas, booked an order last week for 250,000 feet of lumber for the McCormick Harvester Co., of Chicago.

The Reliance Lumber Co., of Beaumont, recently closed a contract with a Central American colonization company to furnish lumber and shingles for 100 houses. Further orders for material for warehouses and other buildings are expected.

The clearances of wood products from Pensacola, Fla., on the 22d inst. were as follows: Sawn timber 1,260,000 superficial feet, hewn timber 47,900 cubic feet and 1,600,000 feet of lumber to Great Britain, Continental and South American ports.

The Cypress Lumber Co., at Apalachicola, and principal office in Boston, Mass., has issued a pocket calendar for 1898 containing also a fund of useful information relating to postal laws, finance and population of various cities in the United States.

The receipts of building material at the port of New Orleans for the week ending December 23 were as follows: Lumber 1,840,000 feet, shingles 90,000, laths 10,000, oak staves 226,000 and cypress staves 72,000. The total receipts of lum-

ber for the season amounted to 29,785,000 feet, against 26,879,000 feet last year.

The Clarion Lumber Co., of McConkey, Taylor county, West Virginia, was incorporated last week, with a capital of \$50,000 and the privilege of increasing it to \$100,000. The incorporators are J. B. Patterson, of Grafton, W. Va., and parties in Clarion, Pa.

F. W. Blair, of Chattanooga, Tenn., whose saw mill was destroyed by fire in August last, is rebuilding his plant, and has recently purchased a new equipment for the mill. The work on the mill is being pushed forward to completion, and Mr. Blair expects to commence operations early in January, 1898.

It is stated that Mr. George Smyth, of Beaumont, Texas, president of the Sabine Tram Co., will soon commence the construction of a saw mill at the logging headquarters of the company. The mill to be constructed will have a capacity of 100,000 feet a day. Its location will give it marketing facilities in Texas and the Northwest.

Messrs. Donald & Co., timber exporters, of Beaumont, Texas, received last week some extra choice lots of timber cut mostly from the Louisiana side of the Sabine river. The entire lot contained 185 pieces, making a total of 37,697 cubic feet, and averaging 203 cubic feet each. Six pieces were over eighty feet long, and twenty-five sticks between seventy and eighty feet long, the longest stick being eighty-six feet.

The Georgia lumbermen, at their recent meeting in Cordele, adopted the following schedule of minimum prices, which, it is said, will be rigidly maintained. For all lumber on board cars at mills: Heart face dressed decking, \$9; standard, \$8; siding and flooring, first and second, \$12; siding and flooring, 9; common, \$7.50; car sills, as to size, \$9, \$10.50 and \$13; car sills, standard, \$7.50, \$9.50 and \$12.

It is stated that Col. W. Ketchum, of Burlington, Iowa, and H. A. Johnson, of Chattanooga, propose to develop 40,000 acres of timber land in Swain county, North Carolina, by building a spur of the Southern Railroad from Bushnell down the Tennessee river a distance of ten and one-half miles to the mouth of Hazel creek. Providing the Southern will undertake to build the road, they purpose to locate various woodworking factories at the mouth of Hazel creek.

The following vessels cleared and sailed from Brunswick, Ga., last week with cargoes of wood products: Schooner W. H. Sumner for Elizabethport, N. J., with 11,832 crossies; schooner Raymond T. Maul for Philadelphia with 379,000 feet of lumber; bark Bruce Hawkins with a full cargo of lumber, and schooner Frank Howe with 485,000 feet, both for Boston, from the Hilton-Dodge Lumber Co., and the schooner Willie L. Newton for New York with 325,000 feet of lumber.

Among the lumber charters reported in New York last week were the following: Schooner Lelia Smith, 237 tons, from Jacksonville to Cape Verde Islands at or about \$10.50, Spanish gold; schooner Thomas G. Smith, 488 tons, from Pascagoula to Philadelphia at \$5.25; a schooner, 450 tons, from Savannah to Philadelphia at \$4.50, coal out 90 cents; a Norwegian bark, 610 tons, from Sabine Pass to Rio Janeiro at \$15.50, \$2 form; schooner Job H. Jackson, 494 tons, from Fernandina to New York with ties at 15½ cents, and a schooner, 372 tons, from Norfolk to Tampico, Mexico, with creosoted piling.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., December 30.

The movement in phosphate rock is somewhat improved, several vessels having been chartered during the past week to load South Carolina rock for this port. The business, as usual at the close of the year, is light, with prices generally about steady. All reports from points of production in South Carolina placed the output for the year much lower than 1896, and the prospects for the coming year are not at the moment as encouraging as could be desired. In Florida the work of development during the year has been vigorously pursued, both among land and pebble miners. The shipments for the present year will show an increase of more than 75,000 tons of phosphate over 1896, and the prospects for 1898 are reported very favorable. In Tennessee the output is increasing every year, and during the month of November last the shipments from the Mt. Pleasant field amounted to 9302 tons, of which 6079 tons were domestic and 3223 tons were foreign. Among the charters in New York during the past week were the following vessels: Schooners S. B. Marts, 525 tons, and Adele Thackera, 577 tons, from Ashley river to Baltimore with phosphate rock at \$1.75 and \$1.80, respectively; schooner Gertrude Abbott, 565 tons, from Charleston to Cartaret with phosphate at \$2, coal out from Philadelphia at \$1, and schooner Georgetta Lawrence, 299 tons, from Barren Island to Port Royal, S. C., with fertilizer on private terms.

Fertilizer Ingredients.

The market during the week has shown a better volume of business, but at primary points trade is generally quiet, as usual at this season. In the West there has been a better movement in tankage, packers being more disposed to meet the views of Eastern buyers, from whom there is a better demand. Prices throughout the list are generally well maintained. Sulphate of ammonia is firm, but new business is light on account of a better Continental demand in London. Nitrate of soda is firmer, and stocks are further reduced by recent sales. The new schedule for next season's contracts will be announced about the middle of January.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	\$2 30 @ 2 35
Nitrate of soda	1 75 @ 1 80
Blood	1 80 @ —
Hoof meal	1 65 @ —
Azotine (beef)	1 65 @ —
Azotine (pork)	1 65 @ —
Tankage (concentrated)	1 65 @ —
Tankage (9 and 20)	1 55 @ 1 55 and 10
Tankage (7 and 30)	15 00 @ 15 50
Fish (dry)	19 00 @ —
Fish (acid)	12 00 @ —

Phosphate and Fertilizer Notes.

The Farmers' Phosphate Co.'s plant and properties at Dale Creek, Coosaw river, S. C., have just been sold to Messrs. West, Penrose & Co., of London, England, for \$20,000. This mining plant was one of the many mines worked by Capt. C. C. Pinkney, of Charleston, S. C.

The schooner Annie C. Grace cleared from Charleston, S. C., last week with 778 tons of phosphate rock. The total shipments of rock coastwise from Charleston from September 1, 1897, to December 24, amounted to 27,637 tons, against 29,814 tons for the corresponding period last year.

Recent reports of a consolidation of menhaden-oil plants of the Atlantic Coast were confirmed last week. The new company will be known as the American Fisheries Co., and will, it is

stated, have a capital of several million dollars. The headquarters of the new company will be in New York, and N. B. Church will be general manager. The value of the product of the menhaden fishing companies is estimated at from \$5,000,000 to \$8,000,000 per year, about equally divided between the oil and fertilizer.

A meeting of representative fertilizer men of the South was held in Atlanta on the 22d inst. The meeting was strictly private, but it is known that a permanent organization was effected, to be hereafter known as the Southern Fertilizer Association. The organization was the most important ever effected in Atlanta, and it is said that it will control over 40,000,000 tons of fertilizers. Mr. W. A. Clark, of Columbia, S. C., was made president of the association; Mr. A. D. Adair, of Atlanta, vice-president, and H. M. Tucker, secretary and treasurer. Among those present who joined the association were: Messrs. G. W. McIver, Charleston, S. C.; Bright Williamson, Darlington, S. C.; W. A. Clark, Columbia, S. C.; H. C. Fischer, Newnan, Ga.; F. S. Royster, Norfolk, Va.; W. G. Sadler, Nashville, Tenn.; S. T. Morgan, Richmond, Va.; C. E. Borden, Wilmington, N. C.; A. P. Mills, Greenville, S. C.; J. Rice Smith, Augusta, Ga.; A. D. Adair, W. L. Peel, E. S. Riley, John M. Green and C. M. Candler, Atlanta.

The movement in Florida phosphate rock during the present year has been quite active, especially among the pebble miners, whose shipments have been considerable. In land rock the development has been active and foreign shipments through Brunswick and Savannah have aggregated 137,358 tons. From Punta Gorda and Tampa shipments of pebble rock have been larger than usual. The total shipments of land rock and pebble through the ports for the year aggregate 636,126 tons, against 547,869 tons last year. Of the total shipments for 1897 439,770 tons were foreign and 196,356 tons domestic. The following statement shows the comparative shipments of Florida rock for 1896 and 1897: Fernandina, 1897, 177,805 tons; 1896, 129,368 tons. Port Tampa, 1897, 164,674 tons; 1896, 161,258 tons. Punta Gorda, 1897, 101,289 tons; 1896, 74,641 tons. Savannah, 1897, 92,545 tons; 1896, 97,040 tons. Brunswick, 1897, 44,813 tons; 1896, 40,562 tons. Railroads, 1897, 35,000 tons; 1896, 30,000 tons. Consumed, 1897, 20,000 tons; 1896, 15,000 tons. Total, 1897, 636,126 tons; 1896, 547,869 tons.

Iron Markets.

Cincinnati, O., December 27.

The general answer from buyers who are solicited to place their contracts now for pig iron is that they prefer to wait until after taking inventory. It is a common remark that consumption is unprecedentedly large for this time of the year, and the situation is an encouraging one for the beginning of 1898. The only special items of interest are the few large deals that are under negotiation. These consumers believe that prices will have an upward tendency when the demand sets in and think it wise to cover their wants now. There is danger that while waiting to get some slight concession in price the large army of buyers will take hold and the present offers of iron may not be duplicated.

It is believed that consumption and production are now on about an equal footing and no material change in stocks is expected on January 1.

We drop quotations on certain grades of iron to correspond more closely with views of some of the furnaces most anxious to sell.

We quote for cash f. o. b. Cincinnati:

Southern coke, No. 1 foundry	\$9 75 @ \$10 00
Southern coke, No. 2 foundry	9 50 @ 9 75
Southern coke, No. 3 foundry	9 25 @ 9 45
Southern coke, gray forge	9 00 @ 9 25
Southern coke, mottled	9 00 @ 9 25
Southern coke, No. 1 soft	9 75 @ 10 00
Southern coke, No. 2 soft	9 50 @ 9 75
Belfont coke, No. 1, Lake Sup.	11 00 @ 11 50
Belfont coke, No. 2, Lake Sup.	10 50 @ 10 75
Hanging Rock charcoal, No. 1	14 50 @ 15 50
Tennessee charcoal, No. 1	12 50 @ 13 00
Jackson Co. silvew, No. 1	12 50 @ 13 00
Standard Georgia car-wheel	14 25 @ 15 00

New York, N. Y., December 27.

Very considerable interest in the pig-iron market on the part of large consumers has been manifest the past fortnight and some round lots have been booked for delivery the first quarter and some for the first half of next year, indicating the confidence of the buyers, and it is surprising this feeling of security is not more generally apparent and demonstrated in a still larger business, as all conditions seem to justify a belief in the continued betterment and improvement of trade throughout the country. We have no doubt about a fresh impetus to the business occasioned by this improved buying, and while furnaces are producing liberally the iron is being well taken by consumers.

The stocks at the Southern furnaces continue to go off, owing in a measure to the increased export business. The furnaces of Alabama enjoy shipping facilities that, coupled with the low cost of manufacturing in that district, renders their iron the most attractive of all the American pig irons to the foreign buyer. It is a significant fact that, in spite of the continued engineers' strike in Great Britain and the low price of Middlesboro iron abroad, the American product continues to attract attention and command position in nearly every foreign country. It is believed that when the engineers' strike in Great Britain shall have come to an end, the English demand will impart a welcome tonic to the British and Scotch markets which will, of course, be a stimulant to the American iron market and strengthen the trade in general the world around.

The market continues in prices steady as to all the prominent brands, though some round lots have been booked at slight concessions.

We quote for cash f. o. b. New York:

No. 1 X standard Alabama	\$11 00 @ \$11 25
No. 2 X standard Alabama	10 50 @ 10 75
No. 1 X lake ore coke iron	12 50 @ 12 75
No. 2 X lake ore coke iron	12 00 @ 12 25
Niagara coke malleable	12 00 @ 12 25
Standard Georgia charcoal	15 50 @ —

We quote for cash f. o. b. Philadelphia:

No. 1 X standard Alabama	\$11 50 @ —
No. 2 X standard Alabama	11 00 @ —
No. 1 X lake ore coke iron	12 50 @ —
No. 2 X lake ore coke iron	12 50 @ —
Niagara coke malleable	12 50 @ —
Standard Georgia C. C.	15 75 @ —

ROGERS, BROWN & CO.

West Virginia's Mineral Output.

According to the annual report of State Mine Inspector J. W. Paul, of West Virginia, for 1897, the number of counties in West Virginia in which coal is mined on a commercial scale is twenty, and the number of firms operating coal mines on a commercial scale 221. The total production, including commercial and domestic mines, 13,110,528 tons, and the total coke production, 1,351,928 tons. The value of coal at the mines reached a total of \$8,220,301, and the aggregate value of coke at the ovens was \$1,689,906.25. There are 8405 ovens, and they were in operation 199 days, and the coal mines were in operation 191 days. The total number of men employed at the commercial mines and ovens was 21,182. The acres of coal worked out was 1786.

According to statistics being compiled for the new city directory, the city of Atlanta now has 121,000 population. This is an increase of about 3500 over the previous year.

MECHANICAL.

New Double Hollow-Chisel Mortiser.

The machine illustrated is intended for making two mortises at one stroke, and was originally designed for use by those engaged in making sash wholesale, sav-

wide, to drive arbors; one belt six feet eight inches long, two and one-half inches wide, to drive table feed. The countershaft has tight and loose pulleys ten by five inches, and should make 800 revolutions. For further information address the makers, Messrs. J. A. Fay & Co., Cincinnati, Ohio.

use. There is no chance for mistake in taking the correct weight from the beam, as the attachment does it. The illustration, Fig. 1, shows a section of a railroad track scale beam with the Reed recording attachment. The beam is notched as in the ordinary railroad track scale beam. In it are placed six puncturing pins at

beam, and the recording pins puncture the card. One movement records the total weight of the load. The card-holder is the only extra movable part over that of the ordinary beam. The correct weight can be had in less time than by reading from the beam, the latter not being necessary when using the card. A record is obtained which can be referred to at any time, and disputes about weights are adjusted by having a record that is mechanically correct.

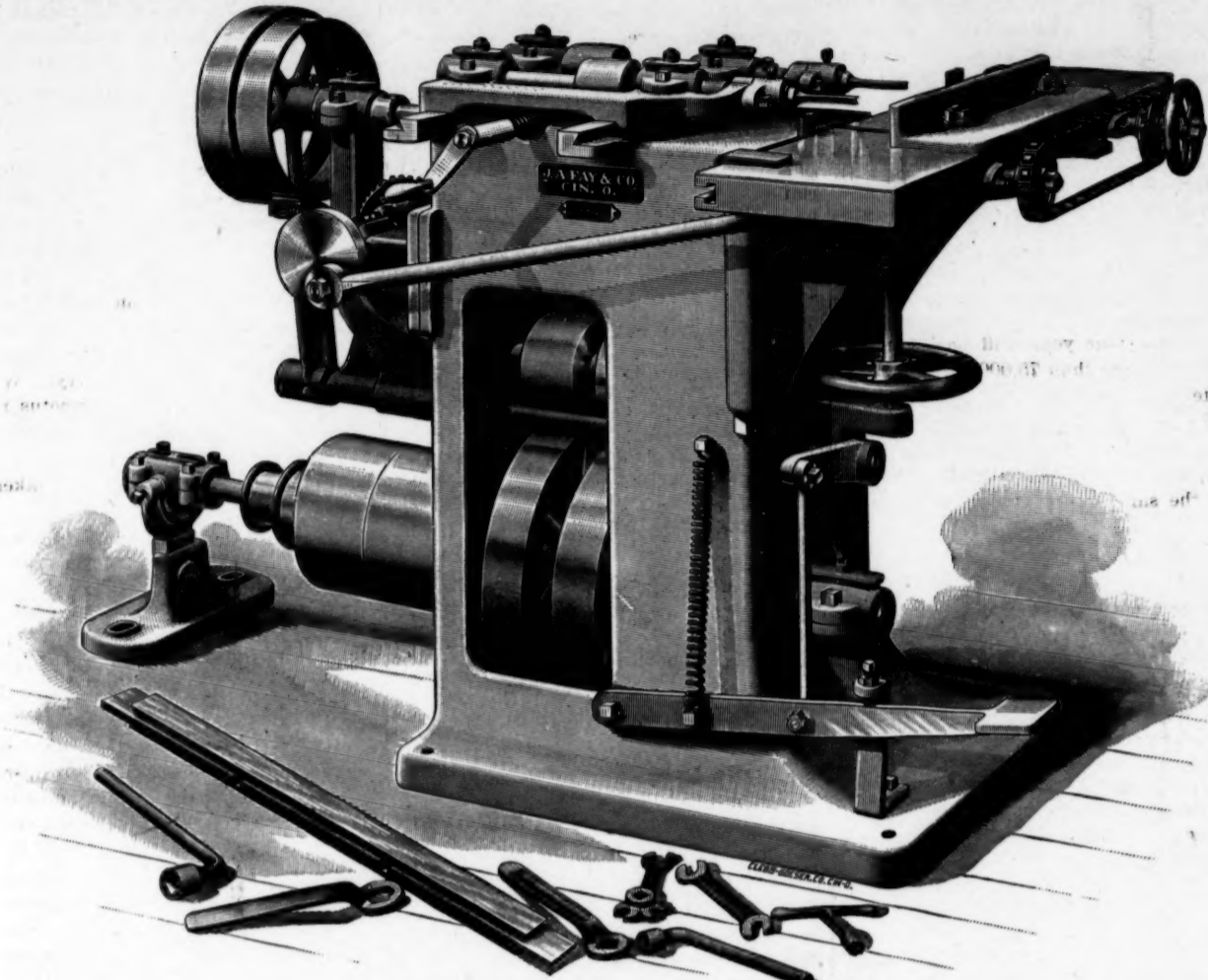
TO DEVELOP BROWN-ORE BEDS.

Sloss Iron & Steel Co. Increases Its Capital to \$5,000,000.

The iron industry of Alabama is to receive an additional impetus as the result of a financial deal which has just been closed. The Sloss Iron & Steel Co., of Birmingham, one of the largest iron producers in the South, made a proposition to its stockholders several months ago to take additional stock in the company to the amount of \$1,000,000 to develop ore lands which it had acquired. The time limit for the sale of this stock has expired, and one of the officials of the company informs a representative of the Manufacturers' Record that the entire issue, with the exception of a few shares, has been taken. The transaction increases the company's capital to \$5,000,000, and means that \$1,000,000 is available for its plans.

The section selected for the company's operations comprises the famous brown-ore deposits near Leeds, Ala. These beds are pronounced by experts to be among the richest, if not the richest, in this country. They were examined by a party of mineral experts early in the present year, and the most conservative were surprised at the depth of the ore veins and their wide range, one calculation being made that some of them extended over a distance of fifty miles. The Sloss Company has obtained control of a large area of the deposits, and work on a branch of the Southern Railway has begun. The haul to the furnaces is about eight miles, and the official referred to is authority for the statement that the new mines will reduce the cost of the raw material to the company to fifty-five cents per ton, a reduction of fifty cents from the present price. These figures seem almost incredible, but are the result of careful calculation.

Much of the additional stock was taken by Northern shareholders of the Sloss Iron & Steel Co.



NO. 5 NEW DOUBLE HOLLOW-CHISEL MORTISER.

ing at least half the time in making mortises for the muntins, but as it will work mortises from six inches to thirteen inches apart, it is adapted for a great variety of work where one or more mortises on the same horizontal plane are necessary.

It is constructed on a very substantial cored frame, having a broad floor support. The table is made of iron supported on the frame in a gibbed slide and adjustable vertically six inches by means of a hand-wheel and screw. It has a horizontal adjustment by hand-wheel and screw for regulating the depth of the mortise. The back of the top plate is fitted with a T slot to receive the adjustable back and end stops. A fence is provided for receiving the thrust of the chisel. The material being brought to its proper position, the table is automatically brought to the chisels and controlled by the operation of a foot treadle.

The chisel mandrels are made of steel of large diameter and run in long bearings that are mounted in heavy frames—each having a lateral adjustment to admit of making mortises from six inches to thirteen inches apart. By the use of hanging binders, endless belts may be used for driving the chisel mandrels, always taking up the slack and keeping them uniformly tight.

The countershaft is supported in the machine and has an adjustable outside bearing. Two chisels three-eighths of an inch by one-half inch and two chisels three-eighths of an inch by nine-sixteenths of an inch, and the augurs to suit each machine, are furnished. Any other sizes can be used up to three-quarters of an inch square.

The internal belting required for each machine is two belts, each seven feet eight inches long, two and one-half inches

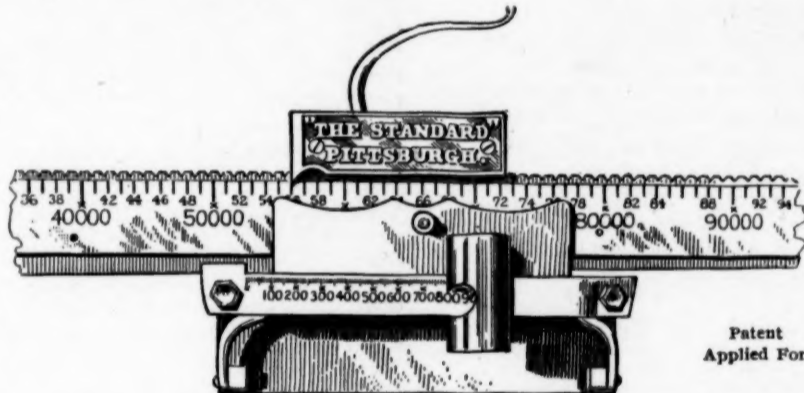


FIG. 1.

Car No. _____ Date, _____ 189
MP'd Weight, _____ " _____ 189
Contents, _____

REED RECORDING ATTACHMENT.

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PATENT APPLIED FOR.

100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119
80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

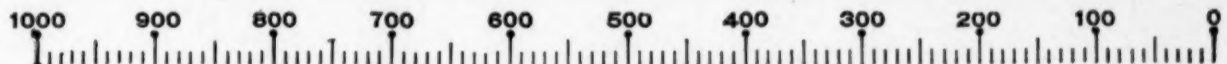


FIG. 2.

Reed Recording Scales.

To meet the demand for accurate weights and correct records in connection with materials of manufacture, the Standard Scale & Supply Co., Limited, of Pittsburg, Pa., is now furnishing the Reed recording attachment. The device can be attached to railroad scales now in

intervals on an incline corresponding to the lines upon the card. The large poise is provided with a card-holder; the small poise has a brass casting and a puncturing pin which extends back of the card-holder. When weighing a load, a card graduated, as shown in Fig. 2, is placed in the card-holder. After the beam is balanced the holder is pressed toward the

Citizens of the Texas coast country are still agitating for the completion of the Aransas Pass improvements. The Rockport Board of Trade, which favors immediate action by the general government to secure a navigable channel twenty feet deep, has appointed a committee to draft a proper bill.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Birmingham—Roofing Works.—The Birmingham Paint & Roofing Co. (established in 1884 and incorporated in 1895) will build at once a large plant for the manufacture of iron roofing of all kinds. Entire equipment of machinery will be purchased. W. H. Rogers, president, 1316 Avenue E.*

Birmingham—Iron Mines, Furnace, etc.—J. W. Worthington will open iron mines and, it is reported, build a new iron furnace, etc.

Florence—Flour Mill.—The erection of a roller-process flour mill is proposed. For information address Tennessee Valley Fertilizer Co.

Florence—Development Company.—The Florence Land Co. has been organized (succeeding the Florence Land, Mining & Manufacturing Co.), with capital stock of \$70,000, for the development of Florence, etc.; John B. Weakley, secretary.

Leeds—Iron Mines, etc.—The Sloss Iron & Steel Co., of Birmingham, has increased its capital stock from \$4,000,000 to \$5,000,000 and will expend a large amount in the development of the new iron mines near Leeds, to which reference has been made recently.

Montgomery—Street Paving.—The city is about to contract for extensive street paving with vitrified brick; R. H. Sommerville, treasurer.*

Piedmont—Flour Mill.—J. H. Hebble will erect new building, three stories high, 30x50 feet, to accommodate machinery for proposed flour mill, to have daily capacity of fifteen to thirty barrels; 50 or 60-horsepower engine and boiler will be needed.*

Sheffield—Rolling Mill.—The construction of the Sheffield Rolling Mill (Hemphill & Johnson, owners) is proceeding rapidly; puddling-mill building 60x243 feet and finishing-mill building 80x100 feet are nearing completion and will soon be ready for the machinery; plant will probably be in operation by April 1, employing 100 skilled workmen and 200 others, producing bar and angle iron, T rails, spikes and cotton ties.

ARKANSAS.

Blackfork—Cotton Mill.—L. O. Way contemplates the erection of a cotton mill.*

FLORIDA.

Orlando—Fruit Company.—Chartered: The Ideal Fruit & Tobacco Co.; capital stock \$20,000.

Port Tampa City—Cigar Factory.—N. Santanna, James F. Johnson and Luther M. Gunz are have incorporated the Santanna Cigar Co., with capital stock of \$30,000, to manufacture cigars.

GEORGIA.

Augusta—Bridge.—The South Carolina & Georgia Railroad has in consideration the construction of a railroad bridge across the Savannah river at Augusta; J. H. Sands, manager, Charleston, S. C.

Butler—Clay Mines.—The Butler Clay Co. has been organized to succeed the Peerless Clay Co.; capital stock increased to \$30,000, and charter has been applied for. Incorporators are T. C. Butler, W. B. Wilson, E. D. Lamb and O. M. Colbert. Company will mine, manufacture and sell clay, etc.

Dawson—Cotton Mill.—A. J. Baldwin & Co. contemplate establishing a cotton-roping mill.*

Elberton—Granite Quarries.—Swift & Wilcox will develop granite quarries in connection with railroad building.*

Gainesville—Harness Factory.—Brandon & Wood have purchased building to enlarge their harness factory; will put in steam engine and other machinery, etc.

Rixville—Telephone Line.—D. A. Tyson will extend his telephone line to Dublin, Danville, Jeffersonville and Macon.

Story—Cannery.—George J. Kemp will establish a large cannery.*

KENTUCKY.

Louisville—Tobacco Factory.—The American Tobacco Co. will build an addition to its factory 84x187—84x120 feet, to cost \$50,000. D. X. Murphy & Bro. will prepare the plans.

Louisville—Tobacco Factory.—It is reported, on what seems reliable authority, that the National Tobacco Works will erect a large addition to their present factory to give employment to 1000 additional hands; present factory employs 2000 hands. The complete plant will have a daily capacity of 175,000 pounds of plug tobacco per day.

Nicholasville—Telephone Lines.—Incorporated: The Nicholasville Telephone Co., capital stock \$10,000, by R. B. Lancaster, R. X. McElroy and others.

LOUISIANA.

Alexandria—Railroad Bridge.—The Gulf, Louisiana & Great Northern Railway Co. will construct a steel bridge across the Red river 900 feet long, with 300-foot draw for railroad and wagon traffic; structure to rest on tubes. Address Joseph J. Waitz, president and general manager, Atchison, Kan.

New Orleans—Engineering Company.—Chartered: The Southern Engineering Co., Limited, capital stock \$50,000, to conduct a general engineering and contracting business; Andrew O. Cunningham, president; Joseph F. Dupuy, vice-president; Henry J. Bruning, secretary-treasurer, and John M. Cunningham, manager.

Opelousas—Brick Works.—C. Setroon and C. H. Miller will establish a brick plant of 50,000 daily capacity; machinery all ordered.

Shreveport—Lumber Mills.—The Austro-American Stave & Lumber Co., Limited, recently noted as incorporated, succeeds the Austro-American Stave & Lumber Co., with a paid up capital stock of \$100,000. The company has been in operation manufacturing and exporting for several years; B. Kobler, manager.

MARYLAND.

Baltimore—Shipyards.—The R. M. Spedden Co., shipbuilders and machinists, have purchased the plant of the Brusstar Shipbuilding Co., including a marine railway; the Spedden Company contemplates constructing a floating dry-dock 700x200 feet in size.

Baltimore—Ice Factory and Electric-light Plant.—The Consumers' Ice Co., August Fenneman, president, will erect a 25-ton ice factory and an electric-light plant to

supply Electric Park, at Arlington; plant will cost complete about \$50,000.

Baltimore—Printing Company.—The W. V. Guthrie Co. has been incorporated to conduct a general lithographing and printing business, with a capital stock of \$5000, by W. Vankirk Guthrie, Charles W. Slagle, Jr., George C. Ehlers, William A. Leitch and Richard Ford.

Baltimore—Telephone Lines.—Incorporated: The Baltimore, Annapolis & Drum Point Telephone Co., with a capital stock of \$12,500, by George Weems Williams and Frank R. Bledler, of Baltimore; John B. Gray and William H. Hellen, of Calvert county, and Samuel Brooke, James W. Owens and Benjamin Watkins, of Anne Arundel county. The company will operate in Baltimore, Drum Point and through Calvert and Anne Arundel counties. The directors are William C. Ellason, H. M. Wharton, Frank R. Bledler and Hyland P. Stewart, of Baltimore; Benjamin Watkins, Henry M. Murray, Samuel Brooke and Robert Moss, of Anne Arundel county, and John B. Gray, William H. Hellen and Thomas Parran, of Calvert county. Length of line contemplated, 80½ miles. Address Frank R. Bledler, Baltimore.

Baltimore—Brass Works.—Incorporated: The Coale Brass Manufacturing Co., by Joseph M. Coale, Frank W. Coale, Joseph G. Coale, Walter I. Coale and William J. O'Brien. The capital stock is \$15,000.

Buckeytown—Stave Mill.—Barker Bros. will erect a stave mill.

MISSISSIPPI.

Wesson—Electric-light Plant.—The city has let contract to R. S. Purser for electric lighting.

MISSOURI.

Cameron—Mills.—James Williams, C. E. Packard, W. S. Sloan and others have incorporated the Reliance Roller Mill Co., capital stock \$412,000.

Missouri—Flour Mill.—Capt. John McBrayer, of Lawrenceburg, Ky., will erect a flour mill in Missouri.

Oregon—Water Works.—The city, having disposed of its \$25,000 worth of bonds, recently voted, will arrange for the construction of the water works; Hiram Phillips, Oriel Building, St. Louis, engineer.

Springfield—Cold-storage Plant.—It is stated that W. J. Lemp, of St. Louis, will build another cold-storage plant in Springfield.

St. Louis—Realty Company.—Charles Garges and Henry L. Haydel have incorporated the Garges Realty & Building Co., with capital stock of \$20,000.

St. Louis—Chemical Company.—Louis E. Frost, A. G. Douglass and Wyatt Shallcross have incorporated the Frost Chemical Co., with capital stock of \$10,000. Address Mr. Frost.

St. Louis—Mining.—W. C. Wrisberg, R. H. Cornell, C. J. Moses, R. M. Noonan and C. W. S. Cobb have incorporated the Enterprise Mining & Realty Co., with capital stock of \$30,000.

NORTH CAROLINA.

Elizabeth City—Cotton-mill Supply Works.—F. P. Petway, of Massachusetts, has leased building on Poindexter street and will put in equipment of machinery for the manufacture of an improved spooling device for cotton mills.

Swain County—Timber-lands Development.—Col. W. Ketcham, of Burlington, Ia., and E. P. McQueen, of Chattanooga, Tenn., have plans for the development of 40,000 acres of timber lands located in Swain county, North Carolina. Branch railroads will be constructed and saw mills erected.

Waynesville—Flour Mill.—W. T. Lee contemplates putting in rolls for flour milling.

Wilmington—Paper-pulp Mill.—J. Willard Smith contemplates the establishment of a paper-pulp mill.*

SOUTH CAROLINA.

Jonesville—Gold Mine.—L. C. Cannon will open the Knott gold mine.

Rock Hill—Water Works.—On January 13 the citizens will vote on issuing bonds for the construction of the proposed water works. Address W. C. Hutchins, mayor.

TENNESSEE.

Bowmantown—Flour Mill.—Benjamin Bowman will erect a flour mill.

Chattanooga—Bottling Works.—Chartered: The Chattanooga Bottling Works, by W. W. Seicer, J. P. Goeston, H. S. Helley, J. B. Hawkins and T. W. Stanfield.

Chattanooga—Bedstead Factory.—The Heron Iron Bedstead Co. has applied for charter, the incorporators being William Heron, Shirley T. Heron, T. G. Montague, J. H. Stolzhus and Charles Heron. The capital stock is \$10,000, and a factory for the production of iron bedsteads will be erected at once.

Chattanooga—Saw Mill.—F. W. Blair is rebuilding his saw mill which was burned recently.

Mayday—Flour Mill.—G. W. Swingle will erect a flour mill.

Monroe County—Gold Mines.—G. B. Cate, of Cleveland, Tenn., will develop gold mines in Monroe county.

Nashville—Hosiery Mill.—The British Hosiery Co., of Olneyville, R. I., will remove part of its mill to Nashville, Tenn. The company has capital stock of \$200,000 and operates three sets cards, three combs, 2500 worsted spindles, ninety knitting machines and 100 sewing machines.

TEXAS.

Beaumont—Saw Mill.—George Smyth will build a saw mill near Beaumont.

Corsicana—Oil Wells.—Rufus Hardy, J. L. Halbert, A. O. Smith and others have formed a company to drill for oil.

Crockett—Knitting Mill.—Shivers Bros. contemplate the establishment of a knitting mill for hosiery production.*

Dallas—Publishing Company.—The Texas History Co. has filed charter, capital stock \$25,000; incorporators—William G. Scarff, Louis Blaylock, Alvin V. Lane, Edwin J. Kiest.

El Campo—Cotton Gin.—C. O. Isaacson will erect cotton gin.

Fort Worth—Mercantile.—Incorporated: The Strawn Mercantile Co., capital stock \$3000, by Paul Waples, W. Burton and A. J. Roe.

Marshall—Railroad-car Shops.—The Texas & Pacific Railroad has in view enlargements to the car shops at Marshall, and possibly the introduction of locomotive building; L. S. Thorne, general manager, Dallas.

McKinney—Flour Mill.—The Collin County Milling Co. will increase its mill's capacity from 200 to 600 barrels.

Shawnee—Cottonseed-oil Mill.—The Shawnee Oil Mill & Gin Co. has been organized, with capital stock of \$100,000, to build a cottonseed-oil mill of 100 tons daily capacity, a cotton gin and yards for the feeding of 10,000 head of cattle. Those interested are E. P. Bomar, P. S. Witherspoon, C. C. Hemming, F. R. Sherwood, of Gainesville; E. W. Kirkland, J. Taylor Bradley, W. T. Peoples and J. T. McKinstry, of Shawnee. Address E. P. Bomar, Gainesville, Texas.

Taylor—Ice Factory.—George W. Burkett, of Palestine, Texas, is now completing arrangements for the erection of the 25-ton ice factory by the Taylor Water & Ice Co.

VIRGINIA.

Blacksburg—Electric-light Plant.—S. A. Bross & Co. will install an electric-light plant in flour mill now building.

Richmond—Water-power Development, Electrical Transmission, etc.—The Virginia Electrical Co., of Baltimore city, has received a charter from the city to operate light and power plants, erect poles, wires, etc., develop power from the watercourse of the James river, etc., which privileges it has applied for, as stated recently in this department. It is thought that possibly \$1,000,000 will be expended. The company will at once arrange for the making of all contracts necessary for the construction, erection and completion of its works to generate power, transmit electricity, etc. Officers of the company: F. I. Todd, president; W. J. Cross, vice-president; A. D. Bobson, secretary-treasurer; directors, F. I. Todd, W. J. Cross, A. D. Bobson, Robert Molinard and Josiah Pierce.

Staunton—Shirt and Overall Factory.—I. Witz, C. B. Sommerville and James A. Fulton will establish a shirt and overall factory, as stated last week; will start with twenty-five machines and increase capacity

as demand warrants. Address 116 Augusta street.

Suffolk—Peanut Plant.—Chartered: The Suffolk Peanut Co., capital stock \$25,000, to establish a plant for cleaning peanuts; John King, president; John B. Pinner, secretary-treasurer.

WEST VIRGINIA.

Berkeley Springs—Handle Factory.—J. A. Robert will establish a handle and spoke factory.

McConkey—Lumber Company.—J. B. Patterson, of Grafton, W. Va., and Clarion (Pa.) parties have incorporated the Clarion Lumber Co., with capital stock of \$50,000.

Nicholas County—Saw Mills, etc.—Mayer Newberger, of Parkersburg, W. Va., acting for the Gauley River Co., has closed contract for 16,000 acres of timber land in Nicholas and Webster counties, which will be developed, about a dozen saw mills being erected to cut lumber on the property.

Piedmont—Combining Paper and Pulp Mills.—The West Virginia Pulp & Paper Co., which has its main office in New York, has purchased the plants and stock of the Piedmont Pulp & Paper Co. and the West Virginia Pulp Co. The company has mills at Piedmont, W. Va., Luke, Md., and Davis, W. Va., and will assume full charge January 1. The officers are William Luke, president; John G. Luke, vice-president and general manager; David L. Luke, treasurer, and Adam K. Luke, secretary.

Wheeling—Tin Mill.—The Wheeling Corrugating Co. will erect a six-mill tin plant, to cost \$180,000, and employ 200 hands.

Wheeling—Lumber Mill.—L. A. Cross and associates have purchased the Gordon Lumber Co. plant, will remodel same and put it in operation.

Wheeling—Coal Mines.—Incorporated: The Richland Coal Works, with an authorized capital of \$50,000, by John R. Gilchrist, M. J. McCoy, M. E. Gilchrist and R. A. Gilchrist, of Wheeling, and C. T. Tallman, of Leatherwood, W. Va. Address Mr. Gilchrist.

BURNED.

Evergreen, Ala.—Hotel Magnolia; loss \$10,000.

Faunsdale, Ala.—Cotton gin of Chadwick & Co.

Fort Valley, Ga.—Fort Valley Manufacturing Co.'s woodworking factory.

Norfolk, Va.—Atlantic Peanut Co.'s plant; loss \$8000.

Ovilla, Texas.—Cotton gin of Will Craig.

Poplar Grove, Ark.—Cotton gin of M. M. Foulkes.

Ronoke, Va.—Cold-storage plant of Virginia Brewing Co.; loss \$6000.

BUILDING NOTES

Auvil, W. Va.—Courthouse.—Tucker county is to build a courthouse to cost \$30,000. Plans and specifications are wanted. Address J. W. Campbell, commissioner.

Beaumont, Texas.—Business Building.—W. R. Caswell will erect 60x80-foot business building.

Charlotte, N. C.—Business Building.—Contract has been awarded at \$13,000 for the plastering, painting, plumbing, marble work, gas piping, electric wiring, etc., of the Piedmont Insurance Building to Nicholas Ittner.

Concord, N. C.—Residence.—Dr. Young will build a residence after plans by F. P. Milburn, of Charlotte, N. C.

Dallas, Texas.—Machinery House.—The Southern Rock Island Plow Co. will erect a five-story machinery house, 100x100 feet.

Durham, N. C.—Auditorium.—Trinity College will build auditorium after plans by a Charlotte architect; address President Kilgo.

Fort Worth, Texas.—Business Buildings.—W. S. Epperson, of Sedalia, Mo., has prepared plans for two business buildings to be erected in Fort Worth by the Missouri Trust Co., of Sedalia, Mo.

Hot Springs, Ark.—Coliseum.—It is proposed to build a \$4000 coliseum. The Business Men's League can give information.

Jacksonville, Fla.—Church.—It is proposed to build a church for the Presbyterians; address T. C. McLaurin, secretary.

Lynchburg, Va.—Business Building.—Dr. W. B. Thornhill has let contract to J. E. Parrish, of Radford, Va., for the erection of a brick business building.

Macon, Ga.—Macon Gaslight & Water Co. will open bids January 3 for erection of brick, metal or slate roofed building and

brick smokestack. Plans and specifications at office of company, 564 Mulberry street; T. D. Tinsley, receiver.

Miami, Fla.—Residence.—N. R. Gibson, of Peoria, Ill., will build a residence in Miami.

Monteagle, Tenn.—Business Houses.—J. D. Robards and Parker Bros. will each erect business houses.

Slatersville, W. Va.—Residence.—Bids will be opened January 3 for erection and completion of a Catholic parochial residence, according to specifications and plans by Franzheim, Glessey & Faris, of Wheeling. Certified check for \$20,000 must accompany each bid. Address Andy Bruner, chairman.

Washington, D. C.—It is stated that a costly hotel will be built. Eugene M. Earle, of New York, and E. K. Somborn, of Chamberlins, Washington, are interested.

Washington, D. C.—Dwellings.—The Evening Star Publishing Co. has accepted plans by William J. Marsh and W. G. Peter for a building to cost \$300,000; structure will be 130 feet high, fireproof steel construction, electric and gas fixtures, steam-heating plant, etc. T. F. Schneider has planned a residence for J. C. Courts. J. G. Hill is preparing the plans for office building to be erected by Columbian University; structure to cost \$125,000, and have steam heat, electric and gas fixtures, electric elevator, etc. B. S. Simmons has planned three residences for Bar & Sanner, builders, to cost \$15,000.

Washington, D. C.—Dwellings.—Mrs. Matilda S. Wilkins will erect three-story 20x31-foot store and residence; T. H. Pickford a two-story house, 17x30 feet; Rock Creek Church a rectory, 41x32 feet, after plans by Appleton P. Clark, Jr.; Thomas J. Lasler three houses, three stories high, 15½x50 feet; F. T. Sanner two houses, three stories, 20x32 feet, steam heat, etc.

RAILROAD CONSTRUCTION.

Railways.

Alexandria, La.—Joseph J. Waitz, president of the Gulf, Louisiana & Great Northern Company, advises the Manufacturers' Record that this company proposes to build from Vermillion Bay to the Arkansas State line and has let contracts for construction of this section, which is to be 270 miles long, to the St. Louis Construction Co., of 1101 Chemical Building, St. Louis; D. P. Alexander, president. The total length of the road, Mr. Waitz states, is to be 1800 miles, its northern terminus being St. Paul, Minn. A 900-foot bridge will be included in the first section.

Baldwin, Fla.—The Cummer Lumber Co. advises the Manufacturers' Record that it will be in the market for twenty-five miles of rails. The road it owns is being built in Baker county, Florida.

Bolivar, Mo.—George S. Goode & Co. confirm the report recently published in the Manufacturers' Record that they have the contract for building the branch of the St. Louis & San Francisco system between Osceola, Mo., and Bolivar, a distance of forty miles. Construction work is to begin at once. The firm may be addressed at Bolivar.

Carthage, N. C.—The Carthage Railroad has been extended to Hallison, eight miles. W. C. Petty is the manager of the road at Carthage.

Charleston, W. Va.—It is reported that the Charleston, Clendennin & Sutton road will be extended between Clay Courthouse, the present terminus, and Sutton during 1898. The extension will be about fifty miles long. Of this distance, twelve miles are graded. Hon. W. A. MacCorkie, of Charleston, is one of the directors of the company, and Charles K. McDermott, superintendent.

Concord, N. C.—It is reported that surveys have been completed for the construction of the Moore County & Western road, between Concord and Southern Pines, and that a bond issue may soon be sold to build it. H. L. Thurston, at Southern Pines, is engineer.

Crossville, Tenn.—It is reported that arrangements have been made by the syndicate owning the Tennessee Central to begin work on the line in the near future. Jere Baxter, at Nashville, is at the head of the syndicate.

Dahlonega, Ga.—F. I. Stone & Co., of Atlanta, confirm the statement in the Manufacturers' Record that they are interested in the proposed electric road between Gainesville and Dahlonega. It is to be twenty-nine miles long. Only surveys have been made as yet.

Elberton, Ga.—Smith & Wilcox inform the Manufacturers' Record that they will build a railroad spur one mile long to connect with the Seaboard Air Line.

Hamburg, Ark.—It is stated that the Mississippi River, Hamburg & Western Railroad Co. has floated an issue of \$400,000 in bonds to construct its line between a point on the Mississippi river and Hamburg, a distance of forty miles. J. M. Parker is president of the company. He was formerly president of the First National Bank of Cripple Creek, Col. A. M. Gibson is chief engineer.

Heartpine, Ga.—The South Georgia Railroad Co., it is reported, may extend its road to the seaboard at Deadman's Bay, Fla. J. W. Oglesby is president of the company.

Hutton, Md.—It is stated that the Preston Railroad has been completed for thirteen miles. It is to be built between Hutton and Aurora, W. Va., fifteen miles. R. P. Crellin, at Whitehaven, Pa., is president of the company.

Raleigh, N. C.—It is reported that the scheme of building a line from Raleigh or Sanford to Lillington, in Harnett county, has been revived.

San Antonio, Texas.—It is reported that the San Antonio & Guadalupe Valley road is to be constructed between San Antonio and Galveston and that contracts will soon be let. John P. Nelson, at San Antonio, is reported as general manager of the company.

San Antonio, Texas.—The Brownsville & San Antonio Railroad Co., it is reported, is negotiating with the Toledo Construction Co., of Toledo, O. (present address Sweetwater, Texas), to build its line for a distance of thirty-five miles. J. M. Nix is manager of the railroad company.

Sweetwater, Texas.—It is reported that ten miles of track have been laid on the Colorado Valley road and fifteen miles graded. Irvin Wheatcroft is general manager of the railroad company, and the Toledo Construction Co., of Toledo, O., is general contractor. The total length of the line will be about seventy miles.

Texarkana, Ark.—It is stated that the Texarkana & Shreveport system may be extended by the construction of several branches. B. Collins, at Texarkana, is general manager of the company.

Victoria, La.—The extension of the railroad being built by the Victoria Lumber Co. will be about seven miles. It is being laid with 40-pound rails. The road is now in operation a distance of eleven miles.

Tuskaloosa, Ala.—The Montgomery & Tuskaloosa division of the Mobile & Ohio has been completed between Columbus, Miss., and Tuskaloosa. The Hanover Construction Co., of Montgomery, Ala., is general contractor for the work.

Uniontown, W. Va.—The Uniontown, Waynesboro & West Virginia Railroad Co. has been formed, with \$1,000,000, to build a line from Uniontown to Waynesboro, Pa., and along the Wheeling Creek Valley to the Pennsylvania State line. W. H. Daly, of Pittsburg, Pa., is president.

Victoria, Texas.—The Guadalupe Valley Railroad Co., which proposes to build a line through Victoria, has been formed with the following officers: Theo. Buhler, president; J. P. Nelson, vice-president and general manager, and A. M. McFadden, secretary. It is stated that surveys are to begin at once and that the road is to be built to Alvin, Seguin and Corpus Christi.

Waycross, Ga.—It is reported that the Waycross Air Line will build an extension fifteen miles in length. B. A. Denmark, at Savannah, is president of the company.

Webster Springs, W. Va.—The Webster Springs Railroad Co. has been formed to build a line from Webster Springs along the Elk river valley to a connection with the West Virginia & Pittsburg road. It will form a Southern extension of the line. The company includes Hon. Johnson N. Camden, of Parkersburg; Myer Newberger and W. N. Miller, of the same place, and Nathan Bushnell, of New York.

Street Railways.

Wheeling, W. Va.—The Wheeling & Elm Grove Railway Co. has received from the city council permission to build its electric line in the suburbs. Brown & Hazlett, of Wheeling, are engineers of the company.

Woodworking Machinery.—Contract for supplying the machinery for the woodworking departments of the railroad shops of the Cincinnati, Hamilton & Dayton Railroad, at Lima, O., has been awarded to Messrs. J. A. Fay & Co., of Cincinnati, O.

New Southern Agency.—The Southern agency of the Lidgerwood Manufacturing Co., New York, builder of the Lidgerwood hoisting engines, cableways and conveying devices for contractors and others, has been placed with the firm of Woodward, Wight & Co., Limited, New Orleans, La.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Boiler.—Greer Machinery Co., Knoxville, Tenn., wants 50-horse-power second-hand return tubular boiler; lowest spot-cash dealers' price.

Boiler and Engine.—See "Flour Mill."

Boilers and Engines.—See "Electrical Machinery."

Canning and Pickling Machinery.—The Gill Nursery Co., Roanoke, N. M., wants to correspond with manufacturers of canning and pickling machinery.

Canning Machinery.—George J. Kemp, Story, Ga., wants canning equipment.

Cotton Cloth.—Proposals will be opened January 6 for delivery at Watertown Arsenal, U. S. A., Watertown, Mass., 50,000 yards cotton cloth, seventy-five inches wide and not over 115-100 yards to the pound. Information furnished by J. W. Reilly, major, United States Army.

Cotton Mill.—A. J. Baldwin & Co., Dawson, Ga., want to correspond with builders of cotton-ropes machinery.

Cotton Mill.—L. O. Way, Blackfork, Ark., wants estimates on equipment for small mill and full information.

Dyeing Cotton Duck.—Sealed proposals in triplicate will be opened January 17 for dyeing to a drab color about 34,000 yards of 12-ounce duck, 12,000 yards of 10-ounce, 4000 yards 8-ounce, all 28½ inches wide; 20,000 yards 7½ to 8-ounce cotton duck, 33 inches wide, and about 8600 shelter-tent halves. Blanks for bids furnished. Addressed John V. Furey, deputy quartermaster, United States Army, Philadelphia, Pa.

Electrical Machinery.—J. R. Torbert, Society Hill, Ala., will be in the market for arc machine of thirty lights and incandescent machine of 600 lights; also engines, boilers, etc.

Flour Mill.—J. H. Hebble, Piedmont, Ala., will buy equipment of machinery for 15 to 30-barrel flour mill, including 50 to 60-horse-power boiler and engine.

Gasoline Motors.—A. T. Snodgrass, Dothan, Ala., expects to be in the market for gasoline motors; probably a large number will be required.

Gas or Gasoline Engine.—F. J. Lillienfeld, Charlottesville, Va., wants prices on a gas or gasoline engine, 12 to 16 horse-power; give full description, cost per horse-power to run, weight, etc.

Iron-working Machinery.—See "Roofing Works."

Knitting Machinery.—Shivers Bros., Crockett, Texas, want information regarding knitting-hosiery mill, cost of machinery, etc.

Machine Tools.—Litchford & Brown, Hearne, Texas, want an engine lathe, 26x30 swing, ten to twelve feet between centres, second-hand, and a planer, six to eight-foot bed, second-hand.

Mineral Oil.—Sealed proposals will be opened January 10 for furnishing quartermaster's department, United States Army, in Jeffersonville, Ind., with 200,000 gallons mineral oil, 135-degree flash test, in cases of two five-gallon cans each. Information furnished on application to Charles W. Williams, depot quartermaster.

Mining Equipment.—F. A. Stratton, Johnson City, Tenn., wants quotations on a ten-stamp gold mill.

Mining Machinery.—Smith Klondike Co., 42 Madison street, Memphis, Tenn., is in the market for diamond core drill for prospecting use, new or second-hand; also mining machinery.

Paper-pulp Machinery.—J. Willard Smith, Wilmington, N. C., wants information and prices on paper-pulp machinery.

Paving.—Bids will be opened January 3 for paving certain streets with vitrified brick in Montgomery, Ala. For plans, specifications, etc., apply to city engineer.

Quarrying Machinery.—Swift & Wilcox, Elberton, Ga., will be in the market for

drills (steam) and other quarrying machinery.

Railway Equipment.—The Cummer Lumber Co.'s railroad, Baldwin, Fla., will buy twenty-five miles of rails and 150 cars.

Railway Equipment.—Durham & Charlotte Railroad, Frank D. Jones, superintendent, Glendon, N. C., expects to be in the market shortly for 56-pound relaying rails.

Roofing Works.—The Birmingham Paint & Roofing Co., Avenue E, W. H. Rogers, president, wants estimates on complete equipment for iron-roofing works.

Structural Iron.—Bone Valley Phosphate Co., of Florida, wants an iron water-tower frame, 16-foot base, 12-foot top, 50 feet to top of frame, to support an 8000-gallon wooden tank, new or second-hand; quote price f. o. b. Address William H. Bunton, treasurer, 91 Bedford street, Boston, Mass.

Sugar-mill Machinery.—W. S. Wilkerson, Hickory Grove, S. C., wants to buy machinery for manufacturing sorghum syrup.

Water Wheel.—Oconee River Mills, Mill-edgeville, Ga., wants to buy a water wheel.

Woodworking Machinery.—Southern Trunk Co., 506 East Clinch street, Knoxville, Tenn., wants light automatic cut-off saw for box work; furniture planer to work from one-eighth to one inch.

TRADE NOTES.

Safe.—A Hall fire and burglar-proof safe is being offered for sale by William H. Ruffin, Louisburg, N. C.

Georgia Saw Mill.—A double-saw mill of 100,000 feet capacity daily, located favorable for coast trade in Georgia, is offered for sale at a bargain by Mr. J. C. Woodhull, 16 Beaver street, New York city.

Asphalt Roofing.—The Warren Chemical & Manufacturing Co., 81 Fulton street, New York city, has recently roofed a new warehouse of about 600 squares and a depot of about 200 squares, both in Augusta, Ga.

Book Typewriter.—Dr. Matthew W. Donavin has been appointed the Baltimore agent, with offices in the Equitable Building, of the Elliott & Hatch Book Typewriter Co., of 253 Broadway, New York.

Large Gas Engines.—Two 120-horse-power engines and two 50-horse-power engines, for running electric-light plants in West Virginia, have just been installed by the Otto Gas Engine Works, of Philadelphia, Pa.

Foundrymen's Association.—A constitution and by-laws has been drafted for the proposed foundrymen's association, which contemplates settling wage differences existing in different sections of the country. A meeting for final organization has been called for January 26, to meet at No. 12 West Thirty-first street. John A. Penton, of Detroit, Mich., can furnish information.

Tinplate Mill.—Mr. Edward E. Erikson, Conestoga Building, Pittsburg, Pa., has just completed a modern and complete tinplate mill for Hamilton & Co., of Pittsburg, Pa. Mr. Erikson conducts a general contracting and consulting engineering business of steel plants, tinplate works, regenerative furnaces, gas producers, glass-house work, etc., and he reports the outlook for the coming year as promising.

Ice Machinery.—Since November 20 some important contracts have been closed by the Fred W. Wolf Co., of Chicago. The most important orders were for a 50-ton refrigerating plant for a Chicago brewing company, 45-ton ice plant for a Cleveland ice company, 75-ton and ammonia condenser for a New Orleans brewing company, 15-ton refrigerating machine and compound condensing engine for installation in Minnesota, 10-ton ice tank and distilling apparatus for a Wilmington (N. C.) brewing company. The company was also awarded what it claims to be the largest contract of the kind ever placed, namely, for ammonia fitting, amounting to \$28,500, for Armour & Co.'s establishment at South Omaha.

Ice Machinery.—The business year of the Frick Co., of Waynesboro, Pa., begins November 1, and since that date the company has closed a number of important contracts for large ice and refrigerating plants. The most important of these are a 200-ton refrigerating plant for Armour & Co., at South Omaha, Neb.; 300-ton ammonia condenser at St. Louis, Mo.; 50-ton ice factory for the National Ice Co., at San Francisco; 20-ton

refrigerating and five-ton ice plant at New Kensington, Pa. The extent of these contracts is an indication of the recognition which the Frick Co.'s machinery receives from users of such apparatus. The Frick works at Waynesboro, Pa., have been so busily engaged during the past several months that it has become necessary to greatly increase its capacity, and extensive additions and new machinery are now being made.

Closed for Enlargement and Repairs.—The four factories of the Nicholson File Co., at Providence, R. I., closed their producing departments on Friday, the 24th, for a period of nine days, till January 3, in order to effect certain absolutely necessary enlargements and repairs. The executive and shipping departments remain open to provide for the continued prompt dispatch of all orders received. Extensive additions are being made to the inside equipment of the factories, while the buildings also are being considerably enlarged. The capacity of this plant producing the Nicholson files will be brought up to where it can more readily meet the demand, as will also the works at Pawtucket, R. I., and Beaver Falls, Pa., where are made the well-known American and Great Western brands, respectively. The company's capacity will be over 70,000 files daily.

TRADE LITERATURE.

Calendar.—The usual neat calendar issued by the India Alkali Works, of Boston, Mass., is being distributed.

Coin Purse.—An attractive souvenir in the shape of a coin purse has been issued by Messrs. Irwin N. Megargee & Co., paper manufacturers, of Philadelphia, Pa.

Calendar.—A '98 calendar, issued by the Brown-Bierce Co., of Dayton, O., is specially prepared to be of assistance to business men. A new arrangement provides a ready means of computing the maturity of notes, etc. The company engages to do extra-fine machine and furniture engraving for illustrating catalogues, etc.

Extensive Water-power.—A prospectus of the Wateree canal water-power at Camden, S. C., is being issued by Mr. S. Logan Lang, of Camden, S. C. It is claimed that this is the largest water-power in one drop in the South, and its development would show over 14,000 horse-power, according to the report of a hydraulic engineer who made an examination of the property. This property is for sale and a thorough examination and investigation is solicited.

Paint for Iron and Steel Protection.—In a pamphlet entitled "A Statement for the Civil Engineer and Architect," the National Paint Works, of Williamsport, Pa., gives accurate data of facts, experience and results on wood and metal decoration and preservation which are of interest and value to all interested in the use and action of paints. The subject of paint for iron and steel protection is receiving much attention at this time from engineers and architects, and hence this pamphlet is very timely. The worth of the pamphlet in question is decidedly marked, and is partly attested by the fact that a number of technical schools in the country have taken the trouble to write for copies of it in order to avail themselves of its information. The requisites of a good paint would seem to be that it shall firmly adhere to the surface, not chip or peel off, not corrode iron or steel, form a surface hard enough to resist frictional influences, be sufficiently elastic to withstand changes of temperature and be unaffected by atmospheric conditions. It is claimed that the product of the National Paint Works secures these indispensable qualities to its users. The list of customers of the company, as given in pamphlet, includes a large number of the most prominent elevated railroads, other steam railroads and bridge and iron works throughout the country.

GENERAL NOTES.

Brief Mention of Various Matters of Current Interest.

More than 100,000,000 cigars were made at Tampa in 1897.

The Chattanooga Chamber of Commerce has endorsed the plan for a convention to take action on the recommendation of the Secretary of War that \$2,000,-

000 be appropriated to remove obstructions in the Tennessee river, between Chattanooga and Riverton.

One thousand ships sailed during 1897 from Baltimore for foreign ports.

During 1897 the actual sales of tobacco at Louisville were 138,156 hogsheads, representing \$11,000,000.

During the year 1897 thirty-three steamers cleared from Baltimore for foreign ports, carrying 45,153,659 gallons of petroleum. All of this oil was refined in Baltimore, having come from the oil regions through the pipe lines of the National Transit Co., which are controlled by the Standard Oil Co. Nearly all of this large volume of oil was shipped to Germany.

At the last meeting of the Alabama Industrial and Scientific Society it was reported that an effort had been made through the governor to have the State represented at the Omaha Exposition, which will be held in the spring, but there was no money available for this purpose. It was resolved, however, that it was the sense of the society that Alabama ought to be represented at the Omaha Exposition by a complete and well-arranged exhibit of the mineral and other resources of the State.

The *Southern States* magazine is read by thousands of farmers, fruit-growers, stock-raisers and business men in all the North, West and Northwest, who are looking to the South as a future home and are trying to inform themselves as to the relative advantages of different parts of the South. If you have farm, garden or orchard property for sale the *Southern States* will put you into communication with buyers. Send for sample copy and rates. Manufacturers' Record Publishing Co., Baltimore, Md.; Wm. H. Edmonds, editor and manager.

Pennsylvania Railroad Co. Will Issue Clerical Orders for 1898.

The Pennsylvania Railroad Co. announces that the issue of clerical orders will be continued for 1898 on the same lines as in effect at present.

Application blanks may be obtained of ticket agents, and same should reach the General Office by December 20, so that orders may be mailed December 31 to clergymen entitled to receive them. Orders will be issued only on individual application of clergymen, to be made on blanks furnished by the Company and certified to by one of its agents.

Christmas and New Year Excursion Rates via the Wheeling & Lake Erie Railway.

Conforming to its past custom, all agents of the Wheeling & Lake Erie Railway will sell reduced-rate excursion tickets between all points on its own line, also to points on its connecting lines, for the Christmas and New Year Holidays.

Excursion tickets will be on sale December 23, 24 and 25, 1897, and January 1, 1898, good to return until January 4, 1898. For further information apply to any agent of the Wheeling & Lake Erie Railway, or address J. F. Townsend, assistant general passenger agent, Toledo, O.

Wise Men

read the advertising pages of the Manufacturers' Record carefully because they are always sure to find something of value; it may be a special sale, or an opportunity for investment, or some new machinery, or some one looking for a location for a factory, or a thousand and one things advertised that may concern you. Every man ought to study newspapers, not simply glance over them, but examine in detail the Manufacturers' Record, for instance, and he will be sure to find something that can be made profitable in his business. In its news columns and in its advertising pages he will find matter that may prove invaluable in his business operations.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

No advertisements but those of a financial character will be accepted for the following page.

Southern Railway Dividends.

The announcement that the Southern Railway Co. has declared a dividend of 1 per cent. on its preferred stock, while not surprising to those closely in touch with its financial affairs, is none the less gratifying to investors in Southern securities. During the period immediately following the reorganization of this company considerable uncertainty existed in the minds of many as to the ability of the financiers back of the scheme to carry out successfully an undertaking of such magnitude. Time has shown, however, that the reorganization was arranged on a prudent and conservative basis and that the investing public need have no fear of default in interest payments on the several securities of the system. The announcement of the dividend is also indicative of the increased business in the South as reflected by the traffic of the several lines, which is another cause for congratulation. That the financial world appreciates the state of affairs is shown by the buoyancy of securities of the Southern Railway Co. in the New York market.

New Corporations.

A new bank is being formed at Midway, Ky., with \$25,000 capital.

The American Midland Town Fire Insurance Co. has been formed at Liberty, Mo., by S. W. Allern and others.

The bank of Russellville, Ark., has been formed, with \$20,000 capital, by T. M. Neal, L. M. Smith and others.

E. L. Squire, L. W. Nichols and others have organized the Phoenix Fire & Marine Insurance Co. at Charleston, W. Va.

New Securities.

It is reported that the Kansas City, Fort Scott & Memphis Railroad Co. has sold an issue of \$500,000 worth of refunding bonds to a Boston syndicate. The bonds bear 6 per cent. interest.

The Chesapeake & Ohio Railroad Co., according to a New York dispatch, has sold over \$2,000,000 in bonds to Redmond, Kerr & Co., of that city. It is stated that this is the last issue of 4½ per cent. bonds that the company will make for several years.

Investors generally will be interested in the announcement of the offer of 60,000 shares of preferred stock of the United Traction Co. of Pittsburg, Pa., referred to in another column. The company controls over 100 miles of line in the city of Pittsburg and suburbs, and represents a consolidation of several of the most important street railways. The lines of road now owned and controlled by the United Traction Co. earned in twelve months ending November 30, 1897, (during seven months of which period the roads were operated under separate managements), more than enough not only to pay the interest on all obligations then outstanding, but also to have paid full dividends on the preferred stock. The reports show that for five months the earnings of the company amounted to a surplus of \$28,000 after deducting charges of every kind and dividends on the preferred stock for six months. The stock is offered for subscription by Messrs. Alexander Brown &

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Sons, of Baltimore, and N. Holmes & Sons, of Pittsburg.

Dividends and Interest.

With this issue of the Manufacturers' Record is presented a partial list of the interest and dividend disbursements made by Southern corporations for the last half of 1897, so far as they have been announced:

Southern Railway Co., 1 per cent. on preferred stock.

Wilmington, N. C.—Carolina Insurance Co., 3 per cent.

Biloxi, Miss.—Bank of Biloxi, 10 per cent. semi-annual.

Eufaula, Ala.—Eufaula Cotton Mills, 4 per cent. semi-annual.

Atlantic & Danville Railway Co., 1 per cent. on preferred stock.

Carrollton, Ga.—Merchants and Planters' Bank, 8 per cent. annual.

Lynchburg, Va.—Lynchburg Cotton Mills, 4 per cent. semi-annual.

Galveston, Texas.—Galveston Brewing Co., 6 per cent. semi-annual.

Charleston, S. C.—South Carolina Loan Co., interest on State bonds.

New Orleans, La.—New Orleans & Carrollton Railroad Co., \$1.50 quarterly.

New Orleans Gas Co., \$3 per share.

Savannah, Ga.—Germania Bank, \$3 per share semi-annual. Brush Electric

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO.

BANKERS AND BROKERS,

No. 213 E. German Street, [KEYES BUILDING.] Baltimore, Md.
Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.

SPERRY, JONES & CO.

DEALERS IN Southern Investment Securities,

410, 412, 414 Equitable Building, Baltimore, Md.

OUR FACILITIES ARE UNEXCELLED.

LIFE INSURANCE POLICIES

BOUGHT AT INVESTMENT PRICES.

WRITE ME FOR QUOTATIONS.

If you have a large line of Life Insurance to place, I can make it worth your while to communicate with me.

E. A. COWLEY, No. 712 MERCHANTS NATIONAL BANK, BALTIMORE, MD.

Light Co., \$3 per share semi-annual.
Citizens' Bank, \$3 per share. Georgia
Southwestern Railroad Co., \$2.50 per share. Metropolitan Trust Association, 6 per cent. annual.

Baltimore & Ohio Railroad Co., interest payments.—Pittsburg & Connellsville first mortgage, 1898, extended 4 per cent. bonds. This payment, which amounts to \$51,620, will be made through Vermilye & Co., of New York. Baltimore & Ohio car trust bonds of 1896, payment \$102,000, at the Mercantile Trust Co., New York. Pittsburg & Connellsville certificates, payment \$16,250, at the Baltimore Trust & Guarantee Co. Interest on Winchester & Potomac first mortgage bonds, \$4417, and dividend on Winchester & Strasburg stock, \$1492, payable at the treasurer's office in Baltimore.

Richmond, Va.—Merchants' National Bank, 3½ per cent. semi-annual. Virginia State Insurance Co., 3 per cent. semi-annual. State Bank of Virginia, 3½ per cent. semi-annual. Union Bank of Richmond, 6 per cent. semi-annual. Savings Bank of Richmond, 3 per cent. semi-annual. Virginia Fire Insurance Co., 4 per cent. semi-annual. Commercial Guarantee Co., 4 per cent. semi-annual. Planters' National Bank, 6 per cent. semi-annual. Virginia Trust Co., 3 per cent. City Bank of Richmond, 3 per cent. semi-annual. Metropolitan Bank of Richmond, 3 per cent. semi-annual. National Fire & Marine Insurance Co., 4 per cent. semi-annual. National Bank of Virginia, 3 per cent. semi-annual. Granite Building Co., 3 per cent. semi-annual.

Baltimore.—The city will pay out as interest on loans the sum of \$436,404.75, as follows: At National Farmers and Planters' Bank—City Hall 6 per cent. \$1,000,000 loan of 1900, \$15,000; City Hall 6 per cent. \$500,000 loan of 1902, \$7500; funding 6 per cent. \$800,000 loan of 1900, \$12,000; consolidated 3½ per cent. \$5,000,000 loan of 1930, \$87,500; Western Maryland Railroad 3¼ per cent. \$1,704,000 loan of 1927, \$27,690; Patterson Park 4 per cent. \$200,000 loan of 1920, \$2000; total, \$151,690. Merchants' National Bank—Public improvement 3½ per cent. \$5,284,400 loan of 1940, \$92,477; Western Maryland Railroad 4 per cent. \$684,000 loan of 1925, \$13,680; Western Maryland Railroad 6 per cent. \$1,000,000 loan of 1902, \$30,000; Western Maryland Railroad 6 per cent. third mortgage bonds amounting to \$875,000, \$26,250; total, \$162,407. Farmers and Merchants' National Bank—Internal improvement 3½ per cent. \$4,850,000 loan of 1928, \$84,875; Harford Run 4 per cent. \$350,000 loan of 1904, \$7000; Harford Run 4 per cent. \$250,000 loan of 1920, \$5000; total, \$96,875. National Exchange Bank—Funding 3½ per cent. \$1,453,300 loan of 1936, \$25,432.75. Monumental Savings and Loan Associa-

JOHN L. WILLIAMS & SONS,

BANKERS,

Dealers in RICHMOND, VA.
Southern Investment Securities,

MUNICIPAL BONDS A SPECIALTY.
Correspondence invited.

TO CONTRACTORS.

If you have any municipal bonds or warrants, taken in payment for building waterworks, court or school houses, jails, etc., write us. Conditions being favorable, we can use them.

F. M. STAFFORD & CO.

Dealers in Southern Municipal Securities,
Chattanooga, Tenn.

Mercantile Trust & Deposit Co.

OF BALTIMORE.

Paid-up Capital, \$1,000,000.
Surplus, \$1,000,000.

DEPOSITS RECEIVED
On which interest is allowed, governed by current rates obtainable.

TRUSTEES AND ADMINISTRATORS.
This company is a Legal Depository for funds in the hands of Trustees or Administrators, and allows interest on same pending distribution. Authorized to act as Executor, Administrator, Guardian, Receiver or Trustee.

ACTS as Trustee of Mortgages of Corporations and accepts Transfer Agency and Registry of Stocks.
Safe Deposit Boxes for Rent.
Vaults supplied for Storage of Silver Chests, etc.

JOHN GILL, of R., President.

MARYLAND TRUST CO.

Corner South and German Sts.

BALTIMORE.

CAPITAL, - \$1,000,000.

A LEGAL DEPOSITORY FOR COURT AND TRUST FUNDS.

Acts as Financial Agent for States, Cities, Towns, Railroads and other Corporations. Transacts a general trust business. Lends money on approved security. Allows interest on special deposits. Acts as Trustee under Mortgages, Assignments and Deeds of Trust; as Agent for the Transfer or Registration of Stocks and Bonds, and for the payment of coupons, interest and dividends.

J. WILLCOX BROWN, PRESIDENT.

LYDD L. JACKSON, FIRST VICE-PRES.

HENRY J. BOWDOIN, SECOND VICE-PRES.

J. BERNARD SCOTT, Secretary and Treasurer.

DIRECTORS.

J. Willcox Brown, Leopold Strouse,
Wm. A. Marburg, Henry Walters,
Basil B. Gordon, H. A. Parr,
Lloyd L. Jackson, B. N. Baker,
Fred. M. Colston, Andrew D. Jones,
H. J. Bowdoin, James Bond,
Joshua Levering, Alexander Brown,
Frank Brown, Douglas H. Gordon,
W. B. Brooks, Jr., Clayton C. Hall,
W. H. Baldwin, J. D. Baker,
Fredk. W. Wood, F. S. Bangs,
F. M. Thieriet, John R. Garrett.

tion, semi-annual dividend. Calvert Building and Loan Association, semi-annual dividend. Firemen's Insurance Co., 4 per cent. semi-annual. George's Creek Coal & Iron Co., \$3 per share semi-annual.

R. H. Soaper has been elected president of the Henderson (Ky.) National Bank, in place of Thomas Soaper, deceased.

Office of Southern Railway Company,

80 BROADWAY, N. Y., December 15, 1897.

At a meeting of the Board of Directors held this day, a dividend of ONE (1) PER CENT. on the preferred stock of the Company was declared, payable January 20, 1898, to preferred stockholders of record on the closing of the transfer books for preferred stock.

The transfer books for preferred stock will close December 30th, 1897, at 3 P. M., and will reopen January 10th, 1898, at 10 A. M.

JOSIAH F. HILL, Secretary.

23 WALL STREET, N. Y., December 15, 1897.
The above dividend of ONE PER CENT. will be payable on Jan. 20, 1898, to holders of record at the close of business on Dec. 30, 1897, on the books of the Voting Trustees for certificates for preferred stock of the Southern Railway Company.

The transfer books of the Voting Trustees for certificates for preferred stock will close Dec. 30, 1897, at 3 P. M., and will reopen Jan. 10, 1898, at 10 A. M.

J. P. MORGAN & CO.,

Agents for Voting Trustees.

ISSUE OF

SIXTY THOUSAND SHARES

—OF THE—

United Traction Co.

OF PITTSBURGH, PA.

Five Per Cent. Cumulative Preferred Stock.

(Being Total Amount of Said Stock.)

PAR VALUE, \$50 PER SHARE.

Dividends Payable January and July.

After careful investigation, we purchased, for ourselves and others, the above sixty thousand shares of Preferred Stock, and offer the same for sale at \$40.00 per share (ex January dividend), payable on Wednesday, the 12th day of January, 1898, at which price this stock would yield a net income of 6½ per cent.

Referring to the prospectus containing the letter of President James D. Callery, etc.; the legal opinions of John G. Johnson, Esq., of Philadelphia, and George C. Wilson, Esq., of Pittsburgh, and certificate of Colonel John A. Tompkins, Expert Accountant, of Baltimore, it will be seen that the United Traction Company (a practical consolidation of three existing traction companies), organized in July, 1897, with a franchise for 999 years, owns and operates, under leases for 999 years, 117.13 miles of trolley road in the cities of Pittsburgh and Allegheny, and connecting those cities with McKeesport, Homestead, Braddock, Wilmerding, Turtle Creek and other important manufacturing towns, and that the lines of road now owned and controlled by the United Traction Company earned in twelve months ending November 30, 1897 (during seven months of which period the roads were operated under separate managements), more than enough not only to pay the interest on all obligations then outstanding, but also to have paid full dividends on the Preferred Stock; that for the five months ending November 30, 1897 (for which period only the United Traction Company has been operating the constituent properties):

Gross receipts were.....\$619,142.43
Operating expenses, including taxes and insurance..... 307,829.91

Net earnings.....\$311,312.52
Pro rata fixed charges for five months 208,041.07

Surplus\$103,270.85
Six months' dividends on \$3,000,000 Preferred Stock... 75,000.00

Surplus earned in five months over full dividends on Preferred Stock for six months\$ 28,270.85

A dividend of 2½ per cent. has been declared upon the Preferred Stock, payable January 3, 1898.

It is expressly provided in the terms and conditions of preference, under which this stock is issued, that the Preferred Stock of this Company is entitled to receive cumulative dividends at the rate of 5 per cent. per annum, which shall at all times be paid, if earned, in preference and priority to the payment of any dividends on the Common Stock, and additionally to share equally with the Common Stock in the surplus profits in each and every year after the Common Stock shall have received dividends at the rate of 6 per cent. for such year.

Application will be made to have this stock "listed" on the Philadelphia, Baltimore and Pittsburgh Stock Exchanges.

Copies of prospectus, maps, counsels' opinion, etc., may be obtained at the offices of the undersigned.

Subscriptions will be opened at our offices on the morning of Wednesday, the 5th day of January, 1898, and closed at 3 P. M. the following day. Allotments will be made as promptly as possible thereafter.

The right is reserved to close the subscription earlier than the above date, to reject applications, or to allot smaller amounts than those applied for.

ALEX. BROWN & SONS, Baltimore, Md.

N. HOLMES & SONS, Pittsburgh, Pa.

December 27, 1897.

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